PRINCIPLES OF ACCOUNTING
INTRODUCTORY

PRENTICE-HALL ACCOUNTING SERIES

H A Finney Editor

PRINCIPLES OF ACCOUNTING

INTRODUCTORY

by

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Preface

When I started work on this revision I sent out, through the publishers, a request for criticisms and suggestions. Many responses were received, and they were helpful beyond measure. Some came from teachers who were using the text and who told me where there were defects which could be remedied. Others came from teachers who were not using it, and who graciously told me why. To all of these teachers I am under an obligation for which I can make no repayment other than the inadequate one of expressing my gratitude here.

You who read this preface presumably want to know what I have tried to do in this revision to make it better than the preceding edition.

Material content. In general, the subject matter is similar to that of the preceding edition; however, most of the chapters have been extensively revised. I have added a considerable amount of new material dealing with developments since the preceding edition was published—such matters as payroll deductions and taxes, and the last-in first-out inventory basis. The treatment of some other subjects—such as treasury stock, surplus, and statement presentation of extraneous profits and losses and corrections of profits of prior periods—has been brought up to date. The discussion of some subjects—corporations, reserves, and departmental profit and loss statements, to mention a few—has been expanded. Much more attention has been given to accounting theory, throughout the book and in a chapter devoted exclusively to theory and principles.

On the other hand, some material has been omitted. The descriptions of private ledgers and factory ledgers have been dropped, and the chapter on consignments has been replaced by a brief discussion dealing principally with the difference between a consignment and a sale, and the differing effects thereof on the statements.

I was told that some students encountered difficulty with notes and bills of exchange, and have tried to eliminate this difficulty by spreading the material over three chapters instead of two, rewriting the text, and postponing the discussion of bills of exchange and the discounting of notes and acceptances receivable until considerably later in the book.

There was a difference of opinion among my cooperating critics regarding the advisability of omitting the chapter on manufacturing cost controls. I have compromised by retaining the chapter (so that the material is available for those who want to use it) but disassociating it entirely from the long practice set.

Immediate introduction of the corporation. In 1932, when the first edition of this text was published, the approach from the individual proprietorship through the partnership to the corporation was traditional. I believed that starting with the corporation might be preferable, and stated one of my reasons in the preface as follows: "Students should obtain, at the very beginning of the course, a clear concept of net worth, or capital. When the course begins with the individual proprietorship, a needless source of confusion is introduced, as students find it difficult to distinguish between the capital of the business and the aggregate net worth of the proprietor." The teacher reaction to the corporation approach appears to have been very generally favorable, and it has been retained. However, the portion of the first chapter dealing with capital stock and surplus as elements of proprietorship equity has been rewritten.

Introductory approach. In the preface to the preceding edition, I wrote: "The various steps of the bookkeeping procedure constitute a related cycle of activity, no one step of which can be fully comprehended without some knowledge of the other steps. Journalizing means little to a student who has never seen an account. Although asset and liability accounts may be easily understood, the purpose and nature of the temporary accounts used in the recording of changes in surplus will not be thoroughly comprehended by a student who does not know that they facilitate the preparation of the profit and loss and surplus statements, and that they are eventually closed to reflect the net surplus change in the Surplus account. And, to complete the cycle, closing the books should not be taught to a student who does not understand journalizing. Therefore, at the earliest possible point in the course, the student should be acquainted with the entire cycle of bookkeeping procedure: journalizing, posting, taking a trial balance, preparing working papers and statements, and closing the books. This cycle has been presented in the first three chapters." The approach seems to have been very favorably received, and the general sequence has been retained in this edition. Although I have heard no criticism with respect to the rapidity of the coverage, I decided to spread out the material over the first four chapters.

Beginning with a nontrading business. In the preface to the preceding edition, I wrote: "In these introductory chapters the illustrations and problems are based on the accounts of companies

which derive their income from fees rather than from merchandise sales; this was done to show more clearly how income and expenses affect net worth, and to avoid the inventory complication in the first explanation of the procedure of closing the books." This feature has been retained.

Assignment material. A good many teachers have asked for additional assignment material. The following material has therefore been provided:

Questions.

Group A problems.

These are very similar in nature and amount to the problems in the preceding editions, and envelopes of laboratory material consisting of ruled forms specifically designed for each problem and practice set are provided, as in the past. In the preface to the preceding edition, I had the following to say about the laboratory material: "If a student is to master the subject of accounting, the consumption of a considerable amount of time in solving problems and writing up practice sets seems unavoidable. Numerous devices have been employed, in the supplies accompanying the text, to minimize the time requirements. Column headings and account names have been printed in the books of original entry and the ledgers. After the student has become familiar with the preparation of working papers, he is provided with forms on which the trial balances have been printed; after he has kept several subsidiary ledgers, subsidiary records are furnished as though prepared by an assistant. In the later chapters, books of original entry, such as the sales book, containing entries for routine transactions, are also furnished." These time-saving devices are retained in the laboratory material for the Group A problems in this edition.

Group B problems.

These are additional problems—many of them short. Some teachers have told me that they would like to have their students prepare solutions to some problems on ordinary ruled paper without the time- and labor-saving laboratory material previously provided for all problems. Therefore, the supplies provided for the Group B problems consist merely of a pad of ruled forms—chiefly journal, ledger, and analysis paper.

A workbook.

This is similar to the progress tests provided with the previous edition; more exercises have been added, and the workbook is printed on 8½ by 11 inch paper to provide more adequate writing space for the students.

There was rather general objection to the length of the practice set assigned with the last third of the book. For this reason, and because of the additional problems provided, this practice set has been reduced to one month's transactions.

H. A. Finney

Contents

PRINCIPLES OF ACCOUNTING
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CHAPTER 1

Assets and Equities

Assets. Assets are things of value owned. Cash, accounts receivable, notes receivable, merchandise, land, buildings, machinery, equipment, and patents are some of the assets that may be owned by a business.

Things may have value for several reasons. Cash has value because other things can be acquired with it. Accounts receivable have value because they can be collected in cash. Merchandise has value because it can be sold for cash, or it can be sold on account and the account can be collected in cash.

But things may have value although there is no intention to convert them into cash. Land, buildings, machinery, and equipment owned by a business are assets of this nature. Although it may be possible to sell them, their value to a business does not arise primarily from the fact that they could be converted into cash, but from the fact that they are useful in the operations. Other assets, such as patents, copyrights, and franchises, have value because of the special rights that they give their owners and because they are helpful in the earning of income.

Equities. The word *equities* is used here as a synonym for *rights* or *interests*. Two classes of people have interests in, or claims against, the assets of a business; they are the creditors and the owners.

Creditors' equities. The interests of creditors are called *liabilities*. Accounts payable, notes payable, bonds payable, accrued wages, and accrued taxes are some of the liabilities, or debts, that may be owed by a business.

Owners' equity. The interest of the owner or owners of a business is called the *net worth*. It is the excess of the assets over the liabilities. For instance:

If a business owns assets in the amount of...	\$5,800.00
And its liabilities (creditors' equities) are..	500.00
Its net worth (owners' equity) is........	\$5,300.00

The original net worth of a business is represented by the investments of the owners. The original net worth is increased by income, and is decreased by expenses and by withdrawals of assets by the owners. For instance, the net worth of \$5,300.00 shown above may have been produced in the manner indicated on the next page.

Owners' original investment		$5,000 00
Add increase in net worth produced by income		700 00
Total		$5,700 00
Deduct decreases in net worth		
Expenses	$150 00	
Withdrawals of funds by the owners	250 00	400 00
Net worth		$5,300 00

Assets are always equaled by equities. Since the owners' equity is the excess of the assets over the creditors' equities, as expressed by the equation

ASSETS	—	LIABILITIES	=	NET WORTH
$5,800	—	$500	=	$5,300

it follows that the assets are always equaled by the equities of the creditors and the owners, as expressed by the equation

ASSETS	=	LIABILITIES	+	NET WORTH
$5,800	=	$500	+	$5,300

Changes in assets, liabilities, and net worth. Transactions cause increases and decreases in assets, increases and decreases in liabilities, and increases and decreases in net worth.

To illustrate, let us observe the effect of some typical transactions of White Realtors Corporation, which was organized on July 1, 19— to engage in selling real estate for clients on a commission basis. In the tabulation on page 3, increases are preceded by plus signs and decreases are preceded by *minus signs*, the amounts of the assets, liabilities, and net worth after each transaction are shown in italics. When studying this tabulation, you should note·

The increases and decreases in assets, liabilities, and net worth caused by the transactions,

The fact that, after each transaction, the assets are equaled by the liabilities and the net worth

Elements of net worth of a corporation. By reference to the preceding tabulation it will be observed that the net worth of White Realtors Corporation at the end of July, in the amount of $5,300.00, consisted of two parts

The original investment	$5 000 00
The increase in net worth resulting from operations	300 00
Total	$5 300 00

These two elements of the net worth of the corporation are called *capital stock* and *surplus* It is desirable to maintain a clear distinction between these two elements.

Tabulation Showing *Increases* and *Decreases*
in Assets and Equities
Caused by Business Transactions
of White Realtors Corporation

Date		Transactions	Assets: Cash	Assets: Account Receivable from J H Duncan	Assets: Office Furniture	Equities: Account Payable to G H Baker	Equities: Net Worth
19— July	1	The corporation began business with cash investments totaling $5,000 00	+5,000 00				+5,000 00
		Balances	5,000 00				5,000 00
	3	Purchased office furniture from G. H Baker on account, $1,500 00			+1,500 00	+1,500 00	
		Balances	5,000 00		1,500 00	1,500 00	5,000 00
	10	Paid G H Baker $1,000 00 to apply on account.	−1,000 00			−1,000 00	
		Balances	4,000 00		1,500 00	500 00	5,000 00
	15	Collected a commission of $100 00 for selling real estate	+ 100 00				+ 100 00
		Balances	4,100 00		1,500 00	500 00	5,100 00
	20	Charged J H. Duncan a commission of $300 00 for selling real estate		+300 00			+ 300 00
		Balances	4,100 00	300 00	1,500 00	500 00	5,400.00
	21	Collected $100 00 from J H. Duncan on account	+ 100 00	−100 00			
		Balances	4,200 00	200 00	1,500 00	500 00	5,400 00
	28	Paid office rent for July, $150 00	− 150 00				− 150 00
		Balances	4,050 00	200 00	1,500 00	500 00	5,250 00
	31	Paid a dividend to the stockholders, $250 00	− 250 00				− 250 00
		Balances	3,800 00	200 00	1,500 00	500 00	5,000 00

White Realtors Corporation was organized by obtaining a state charter which authorized it to issue 50 shares of capital stock of $100 00 par value all these shares were issued for cash Therefore, the original net worth of the corporation consisted of

Capital stock	$5 000 00

The *corporation earned income of $400 00 its net worth then* consisted of two elements as follows

Capital stock	$5 000 00
Surplus	400 00
Total	$5 400 00

The corporation earned additional income of $300 00 its net worth then consisted of the following elements

Capital stock	$5 000 00
Surplus	700 00
Total	$5 700 00

The net worth was reduced by the $150 00 payment for an expense it then consisted of the following elements

Capital stock	$5 000 00
Surplus	550 00
Total	$5 550 00

When $250 00 of the equity of the stockholders of White Realtors Corporation was paid to them in the form of a dividend, the net worth was reduced to $5 300 00 Dividends are presumed to be distributions of funds produced by profitable operations, and not distributions of funds originally invested therefore, dividends are deducted from the Surplus element of net worth After the payment of the dividend the net worth consisted of the following

Net worth	
Capital stock	$5 000 00
Surplus	300 00
Total	$5 300 00

The tabulation on page 5 is the same as the one on page 3, except that the capital stock and surplus elements of net worth are shown separately

Ledger accounts The increases and decreases in assets, liabilities, and net worth caused by business transactions are recorded in accounts The account form may be ruled in the manner illustrated on page 6

Tabulation Showing Increases and Decreases in Assets, Liabilities, and Net Worth Caused by Business Transactions of White Realtors Corporation

Date		Transactions	Assets			Equities		
							Net Worth	
			Cash	Account Receivable from J. H. Duncan	Office Furniture	Account Payable to G. H. Baker	Capital Stock	Surplus
19— July	1	The corporation received $5,000.00 in cash in exchange for capital stock	+5,000.00				+5,000.00	
		Balances	5,000.00				5,000.00	
	3	Purchased office furniture from G. H. Baker on account, $1,500.00			+1,500.00	+1,500.00		
		Balances	5,000.00		1,500.00	1,500.00	5,000.00	
	10	Paid G. H. Baker $1,000.00 to apply on account	−1,000.00			−1,000.00		
		Balances	4,000.00		1,500.00	500.00	5,000.00	
	15	Collected a commission of $400.00 for selling real estate	+ 400.00					+400.00
		Balances	4,400.00		1,500.00	500.00	5,000.00	400.00
	20	Charged J. H. Duncan a commission of $300.00 for selling real estate		+300.00				+300.00
		Balances	4,400.00	300.00	1,500.00	500.00	5,000.00	700.00
	21	Collected $100.00 from J. H. Duncan on account	+ 100.00	−100.00				
		Balances	4,500.00	200.00	1,500.00	500.00	5,000.00	700.00
	28	Paid office rent for July, $150.00	− 150.00					−150.00
		Balances	4,350.00	200.00	1,500.00	500.00	5,000.00	550.00
	31	Paid a dividend to the stockholders, $250.00	− 250.00					−250.00
		Balances	4,100.00	200.00	1,500.00	500.00	5,000.00	300.00

DATE	EXPLANATION	REF	AMOUNT	DATE	EXPLANATION	REF	AMOUNT

Accounts may be kept in a bound book, in a loose-leaf binder, or on cards The book, binder, or card file containing the accounts is called a *ledger*

The words *Date, Explanation, Ref*, and *Amount* do not usually appear in accounts, but are shown above to indicate the purpose of each column.

The *Date* column shows the date of the transaction.

The *Explanation* column may contain some short comment explaining the nature of the transaction.

Ref is an abbreviation of *Reference*. The use of this column is explained in Chapter 2

The *Amount* columns contain the dollar entries

Recording increases and decreases. An account is kept with each asset, with each liability, with capital stock, and with surplus

Increases are recorded on one side, and decreases are recorded on the other. Which is the increase side, and which is the decrease side? That depends on the nature of the account.

In ASSET accounts:

Increases are recorded on the left side.

Decreases are recorded on the right side.

In LIABILITY and NET WORTH accounts

Increases are recorded on the right side.

Decreases are recorded on the left side.

The methods of recording changes in assets and changes in liabilities and net worth may be stated graphically as follows:

Asset Accounts		Liability and Net Worth Accounts	
Increases	Decreases	Decreases	Increases

Debit and credit. The left side of an account is called the *debit* side, the right side is called the *credit* side

An entry on the left side of an account is called a *debit* entry, an entry on the right side of an account is called a *credit* entry.

The two words are also used as verbs. When you make an entry on the left side of an account, you are debiting the account. When you make an entry on the right side, you are crediting the account.

Illustration of entries in accounts. The transactions of White Realtors Corporation shown in the tabulation on page 5 are recorded below in ledger accounts. The entries for each new transaction are shown in italics.

July 1—Cash in the amount of $5,000.00 was received for capital stock.

Cash

19—									
July	*1*	*Investment*		*5,000 00*					

Capital Stock

					19—				
					July	*1*	*Issued for cash*		*5,000 00*

(The debit to Cash records the acquisition of cash; the credit to Capital Stock records the initial net worth.)

July 3—The company purchased $1,500.00 worth of office furniture from G. H. Baker on account.

Office Furniture

19—									
July	*3*	*Purchased*		*1,500 00*					

G. H. Baker

					19—				
					July	*3*	*For furniture*		*1,500 00*

(The debit to Office Furniture records the acquisition of an asset; the credit to G. H. Baker records the incurring of a liability.)

July 10—The company paid $1,000.00 to G. H. Baker to apply on account.

G. H. Baker

19—					19—				
July	*10*	*Cash payment*		*1,000 00*	July	3	For furniture		1,500 00

Cash

19—					*19—*				
July	1	Investment		5,000 00	*July*	*10*	*Paid G. H. Baker*		*1,000 00*

(The $1,000.00 debit to Baker records a decrease in the liability: the $1,000.00 credit to Cash records a decrease in the asset.)

July 15—The company collected $400 00 in cash as a commission for selling a piece of real estate for a client

Cash

Date		Item	Amount	Date		Item	Amount
19—				19—			
July	1	Investment	5 000 00	July	10	Paid G H Baker	1,000 00
	15	*Commission*	*400 00*				

Surplus

Date		Item	Amount	Date		Item	Amount
				19—			
				July	*15*	*Commission*	*400 00*

(The $400 00 debit to Cash records an increase in the asset, the credit to Surplus records an increase in net worth)

July 20—The company sold real estate for J H Duncan The commission was $300 00 but it was not immediately collected

J H Duncan

Date		Item	Amount	Date		Item	Amount
19—							
July	*20*	*Commission charged*	*300 00*				

Surplus

Date		Item	Amount	Date		Item	Amount
				19—			
				July	15	Commission	400 00
					20	*Commission*	*300 00*

(The debit to Duncan records the acquisition of an account receivable asset, the credit to Surplus records an increase in net worth)

July 24—The company collected $100 00 from J H Duncan to apply on account

Cash

Date		Item	Amount	Date		Item	Amount
19—				19—			
July	1	Investment	5 000 00	July	10	Paid G H Baker	1,000 00
	15	Commission	400 00				
	24	*J H Duncan*	*100 00*				

J H Duncan

Date		Item	Amount	Date		Item	Amount
19—				*19—*			
July	20	Commission charged	300 00	*July*	*24*	*Collection*	*100 00*

(The $100 00 debit to Cash records an increase in the cash asset, the credit to Duncan records a decrease in the account receivable asset)

July 28—The company paid its office rent for the month of July, $150 00

Surplus

Date		Item	Amount	Date		Item	Amount
19—				19—			
July	*28*	*Office rent*	*150 00*	July	15	Commission	400 00
					20	Commission	300 00

Cash

19—				19—			
July	1	Investment	5,000 00	July	10	Paid G. H. Baker	1,000 00
	15	Commission	400 00		28	*Office rent*	*150 00*
	24	J. H. Duncan	100 00				

(The debit to Surplus records a decrease in net worth; the credit to Cash records a decrease in that asset.)

July 31—The company paid a dividend of $250.00 to its stockholders.

Surplus

19—				19—			
July	28	Office rent	150 00	July	15	Commission	400 00
	31	*Dividend*	*250 00*		20	Commission	300 00

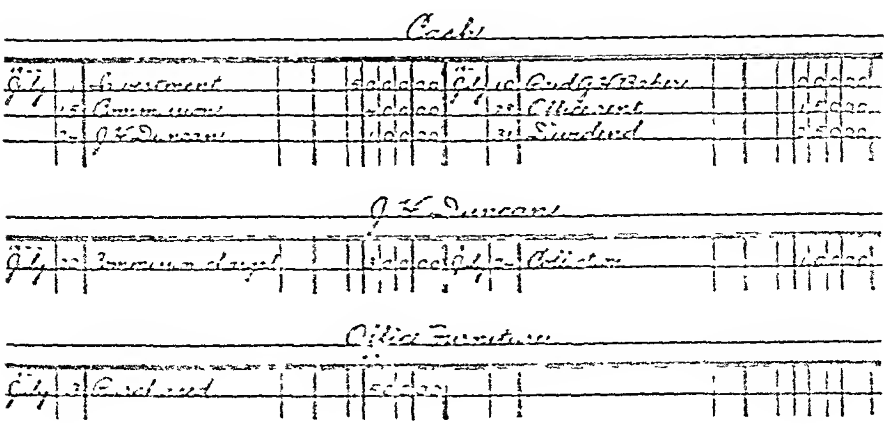
Cash

19—				19—			
July	1	Investment	5,000 00	July	10	Paid G. H. Baker	1,000 00
	15	Commission	400 00		28	Office rent	150 00
	24	J. H. Duncan	100 00		*31*	*Dividend*	*250 00*

(The $250.00 debit to Surplus records a decrease in net worth; the credit to Cash records a decrease in that asset.)

The ledger accounts containing entries for all the foregoing transactions are shown below:

Asset accounts:



Liability and net worth accounts

G H Baker

July	10	Cash payment	1 000 00	July	3	For furniture	1 500 00

Capital Stock

				July	1	Issued for cash	5 000 00

Surplus

July	28	Office rent	150 00	July	15	Commission	400 00
	31	Dividend	250 00		20	Commission	300 00

Equality of debits and credits Double entry bookkeeping derives its name from the fact that the complete record of each transaction requires debit and credit entries of equal amount Since the debit and credit entries for each transaction are equal it is obvious that the total debit entries in all the accounts in the ledger should be equal to the total credit entries

The equality of the debits and credits in the ledger of White Realtors Corporation could be proved by listing the total debits and credits of each account thus

	Total Debits	Total Credits
Cash	5 500 00	1 400 00
J H Duncan	300 00	100 00
Office Furniture	1 500 00	
G H Baker	1 000 00	1 500 00
Capital Stock		5 000 00
Surplus	400 00	700 00
	8,700 00	8 700 00

Trial balance If the total of the debit entries in an account exceeds the total of the credit entries the account has a debit balance If the credits exceed the debits the account has a credit balance

It is customary to prove the equality of the debits and the credits in a ledger by listing only the account balances instead of the total debits and total credits A list of account balances is

called a *trial balance.* Following is the trial balance of the accounts of White Realtors Corporation.

WHITE REALTORS CORPORATION
Trial Balance
July 31, 19—

Cash	4,100.00	
J. H. Duncan	200.00	
Office Furniture	1,500.00	
G. H. Baker		500.00
Capital Stock		5,000.00
Surplus		300.00
	5,800.00	5,800.00

Computing balances of accounts. In order to prepare the trial balance, it is necessary to compute the balance of each account. This is done as follows:

Add the debit column of the account, and enter the total in small pencil figures at the bottom of the column.
Add the credit column of the account, and enter the total in small pencil figures at the bottom of the column.
Enter the balance in small pencil figures in the Explanation space on the debit side if the account has a debit balance, or on the credit side if the account has a credit balance. Enter the balance on the line of the last entry.

The following illustration shows how the balance in the Cash account of White Realtors Corporation was computed:

Cash

July	1	Investment		5,000.00	July	10	Paid G. H. Baker		[illegible]000.00
	15	Commissions		[illegible]00.00		28	Office rent		150.00
	24	J. H. Duncan		100.00		31	Dividend		250.00

If only one entry appears on either side of an account, a pencil total of that side is, of course, unnecessary. If an account contains only one entry, that entry is the balance of the account, and it is unnecessary to write the balance again in the Explanation column. If an account contains only debit entries or credit entries, the pencil total of the column shows the balance of the account, and therefore it is unnecessary to enter the balance in the Explanation column.

Balance sheet. The assets, liabilities, and net worth of a business are shown by a statement called a *balance sheet.* In the customary form of balance sheet,

- The assets are shown on the left side.
- The liabilities and the net worth (or the creditors' and the stockholders' interests in the assets) are shown on the right side.
- The two sides of the balance sheet are equal because the assets are always equaled by the total of the liabilities and the net worth.

The following is an illustration of a balance sheet. It was prepared from the accounts of White Realtors Corporation shown in this chapter.

WHITE REALTORS CORPORATION
Balance Sheet
July 31, 19—

Assets		Liabilities and Net Worth		
Cash	$4,100.00	Liabilities		
Accounts Receivable	200.00	Accounts Payable		$ 500.00
Office Furniture	1,500.00			
		Net Worth		
		Capital Stock	$5,000.00	
		Surplus	300.00	5,300.00
	$5,800.00			$5,800.00

You should note the following facts about this balance sheet:

- The heading of the statement shows (1) the name of the company, (2) the name of the statement (balance sheet), and (3) the date.
- On July 31, 19—, the company owned assets valued at $5,800.00.
- A creditor had a $500.00 claim against these assets; the stockholders' interest in the assets was $5,300.00.
- Although the ledger shows the names of individual debtors and creditors, the balance sheet shows merely Accounts Receivable and Accounts Payable. The accounts receivable item in the *balance sheet includes the total balances receivable from all* trade debtors, and the accounts payable item includes the total amount payable to all trade creditors.
- The stockholders' interest is shown in two amounts:
  - Capital Stock—the amount invested by the stockholders.
  - Surplus—the portion of net worth produced by profitable operations and not paid to the stockholders as dividends.

A balance sheet may also be prepared in the form illustrated on the following page.

WHITE REALTORS CORPORATION
Balance Sheet
July 31, 19—

Assets

Cash		$4,100.00
Accounts Receivable		200.00
Office Furniture		1,500.00
		$5,800.00

Liabilities and Net Worth

Liabilities:		
Accounts Payable		$ 500.00
Net Worth:		
Capital Stock	$5,000.00	
Surplus	300.00	5,300.00
		$5,800.00

Alternative terminology. A considerable number of accountants recently have advocated changing long-established balance sheet terminology in two particulars, as follows:

Substituting "Equities" for "Liabilities and Net Worth."
And substituting "Owners' Equity" for "Net Worth."

With these changes, the foregoing balance sheet would appear as follows:

WHITE REALTORS CORPORATION
Balance Sheet
July 31, 19—

Assets

Cash		$4,100.00
Accounts Receivable		200.00
Office Furniture		1,500.00
		$5,800.00

Equities

Liabilities:		
Accounts Payable		$ 500.00
Owners' Equity:		
Capital Stock	$5,000.00	
Surplus	300.00	5,300.00
		$5,800.00

Some good theoretical reasons can be presented in favor of these proposed changes from established practice—particularly the change from "Net Worth" to "Owners' Equity"; some of these reasons are stated in later chapters.

CHAPTER 2

Changes in Surplus
Journalizing and Posting

Recording changes in surplus In the first chapter, all changes in surplus were recorded in the Surplus account, as follows

Surplus

Date		Explanation		Amount	Date		Explanation		Amount
19—					19—				
July	28	Office rent		150 00	July	15	Commission		400 00
	31	Dividend		250 00		20	Commission		300 00

This procedure was used because it was desired to show you, in as simple a way as possible, that earnings increase the surplus, and that expenses and dividends decrease the surplus In actual practice it is customary to record such surplus increases and decreases in several accounts *instead of* in one account For instance, one account may be credited with earnings another may be debited with expenses, and still another may be debited with dividends

The increases and decreases in the surplus of White Realtors Corporation during July, *instead of being recorded in the Surplus account*, would be recorded in three accounts as follows

Commissions Earned

Date		Explanation		Amount	Date		Explanation		Amount
					19—				
					July	15			400 00
						20			300 00

(The $700 00 credit balance in this account shows how much the surplus was increased during July by the earning of commissions)

Expense

Date		Explanation		Amount	Date		Explanation		Amount
19—									
July	28	Office rent		150 00					

(The $150 00 debit balance in this account shows how much the surplus was decreased during July by expenses)

Dividends

Date		Explanation		Amount	Date		Explanation		Amount
19—									
July	31			250 00					

(The $250 00 debit balance in this account shows how much the surplus was decreased during July by the payment of a dividend)

You should think of these income, expense, and dividend accounts as subdivisions of the Surplus account.

Journal and ledger. Although transactions *could be* recorded directly in the ledger accounts, as was done in Chapter 1, it is customary to use at least two books:

(1) *A Journal.*

The first record of a transaction is made in this book.
The entry for each transaction shows what accounts will later be debited and credited in the ledger.
The procedure of recording transactions in the journal is called *journalizing*. A journal is called a *book of original entry*.
The journal containing a record of the transactions of White Realtors Corporation appears on page 16.

(2) *A ledger.*

After the transactions have been recorded in the journal, the debits and credits to the various accounts, as shown by the journal entries, are recorded in the ledger accounts by a process called *posting*.

Journalizing. The journal entry for a transaction is made as follows:

(1) Write the date of the transaction in the date column; the year, month, and day of the month should be written in the first journal entry on each page; entries on the same page for subsequent transactions in the same year and month need show only the day of the month.
(2) Write the name of the account to be debited, and enter the amount of the debit in the left money column.
(3) On the next line, write the name of the account to be credited, and enter the amount of the credit in the right money column. The name of the account credited should be indented.
(4) Write an explanation of the transaction.
(5) Leave a blank line after each journal entry.

Posting. Posting is the process of recording in the ledger accounts the debits and the credits to these accounts indicated by the journal entries.

The procedure of posting consists of the steps stated on page 16:

Journal (Page 2)

DATE		ACCOUNT DEBITED / ACCOUNT CREDITED	L F	DEBIT AMOUNT	CREDIT AMOUNT
July	1	Cash		5000 00	
		Capital Stock			5000 00
		Stockholders paid in $5000.00 in cash in exchange for capital stock			
		Office Furniture		1500 00	
		G H Baker			1500 00
		Purchased office furniture from Baker on account			
	10	G H Baker		1000 00	
		Cash			1000 00
		Payment to Baker on account			
	15	Cash		400 00	
		Commissions Earned			400 00
		Collection of commission for selling real estate			
	20	J W Duncan		300 00	
		Commissions Earned			300 00
		Charged Duncan a commission for selling real estate for him			
	24	Cash		100 00	
		J W Duncan			100 00
		Collection from Duncan to apply on account			
	28	Expense		150 00	
		Cash			150 00
		Paid office rent for July			
	31	Dividends		250 00	
		Cash			250 00
		Paid a dividend to stockholders			

(A) First post the debit member of the entry
- (1) Turn to the ledger account to be debited
- (2) Enter on the debit side of the account
  - (a) The date
  - (b) The number of the journal page *from* which the entry was posted
  - (c) The amount of the debit
- (3) Turn to the journal and, in the L F (which means ledger folio, or ledger page) column, enter the number of the ledger page *to* which the entry was posted

(B) Post the credit member of the journal entry similarly.

Entering the journal page in the ledger and the ledger page in the journal serves two purposes:

While the bookkeeper is posting. it shows how much of the posting has been done. Thus, if the bookkeeper is called away before the posting is completed, he knows that the work should be taken up again with the first journal entry showing no ledger page number.

After the posting has been completed, the numbers serve as cross references between the journal and the ledger. This is particularly helpful if the bookkeeper, in looking at some ledger account, wishes to find the journal entries from which the postings were made.

Illustrative journal and ledger after posting. Following are the journal and ledger of White Realtors Corporation after the completion of the posting.

Journal (Page 1)

19—					
July	1	Cash	1	5,000 —	
		Capital Stock	5		5,000 —
		Stockholders paid in $5,000.00 in cash in exchange for capital stock.			
	3	Office Furniture	3	1,500 —	
		G. H. Baker	4		1,500 —
		Purchased office furniture from Baker on account.			
	10	G. H. Baker	4	1,000 —	
		Cash	1		1,000 —
		Payment to Baker on account.			
	15	Cash	1	400 —	
		Commissions Earned	6		400 —
		Collection of commission for selling real estate.			
	20	J. H. Duncan	2	300 —	
		Commissions Earned	6		300 —
		Charged Duncan a commission for selling real estate for him.			
	24	Cash	1	100 —	
		J. H. Duncan	2		100 —
		Collection from Duncan to apply on account.			
	28	Expense	7	150 —	
		Cash	1		150 —
		Paid office rent for July.			
	31	Dividends	8	250 —	
		Cash	1		250 —
		Paid a dividend to stockholders.			

Asset Accounts

Cash (Page 1)

Date			L F	Amount	Date			L F	Amount
19—					19—				
July	1		1	5 000 —	July	10		1	1 000 —
	15		1	400 —		28		1	150 —
	21		1	100 —		31		1	250 —

J H Duncan (Page 2)

Date			L F	Amount	Date			L F	Amount
19—					19—				
July	20		1	300 —	July	24		1	100 —

Office Furniture (Page 3)

Date			L F	Amount	Date			L F	Amount
19—									
July	3		1	1 500 —					

Liability Account

G H Baker (Page 4)

Date			L F	Amount	Date			L F	Amount
19—					19—				
July	10		1	1 000 —	July	3		1	1 500 —

Net Worth Accounts

Capital Stock (Page 5)

Date			L F	Amount	Date			L F	Amount
					19—				
					July	1		1	5 000 —

Commissions Earned (Page 6)

Date			L F	Amount	Date			L F	Amount
					19—				
					July	15		1	400 —
						20		1	300 —

Expense (Page 7)

Date			L F	Amount	Date			L F	Amount
19—									
July	28	Office rent	1	150 —					

Dividends (Page 8)

Date			L F	Amount	Date			L F	Amount
19—									
July	31		1	250 —					

The journal is the same as the one previously illustrated, except that the ledger page numbers have been entered in the L F column, to indicate that the postings have been made You should trace the debits and credits shown by the journal entries into the ledger accounts

Since the journal contains a complete explanation of each transaction, it is usually unnecessary to write explanatory comments in the ledger accounts If the bookkeeper wishes to know, for instance, why the Cash account was debited and credited with the various amounts shown he can trace each entry back to the journal, where a complete record will be found of each transaction affecting cash

Purpose of journal and ledger The journal contains a record of all the transactions in their chronological order, showing the names of the accounts to be debited and credited, and a complete

statement of all important facts regarding each transaction. The ledger classifies all these debit and credit entries according to the accounts affected.

Thus, if one wishes to know what transactions occurred on July 15, he will look in the journal. If he wishes to determine the increases and decreases in cash during July, he will look at the Cash account in the ledger.

The journal also provides a place where more comprehensive explanatory comments can be written about the transactions than can be written in the limited space available in the Explanation Columns of the ledger accounts.

Trial balance. The trial balance of the foregoing ledger appears below:

WHITE REALTORS CORPORATION
Trial Balance
July 31, 19—

Cash	4,100 00	
J H Duncan	200 00	
Office Furniture	1,500 00	
G H Baker		500 00
Capital Stock		5 000 00
Commissions Earned		700 00
Expense	150 00	
Dividends	250 00	
	6 200 00	6,200 00

Locating errors. If a trial balance does not balance, the amount of the difference should be determined: the following steps may be taken to locate the error:

(1) Refoot the trial balance.
(2) See that the balances have been carried correctly from the ledger to the trial balance. Watch for:
   (a) Differences between the balances in the accounts and the balances shown in the trial balance.
   (b) Debit balances in the accounts entered on the credit side of the trial balance, and vice versa.
   (c) Ledger balances omitted from the trial balance.
(3) Recompute the ledger balances, this will involve the following steps:
   (a) Refooting the debit side and the credit side of each account.
   (b) Recomputing the difference between the two sides of each account.

(4) Check the postings from the journal to the ledger Beginning with the first journal entry, see whether each debit and credit has been correctly posted Watch for

(a) Errors in amounts
(b) Postings to wrong accounts
(c) Posting a journal debit to the credit side of the ledger, or a journal credit to the debit side of the ledger

As each entry in the journal is traced to the ledger, place a check mark (✓) beside the amount in the journal and also beside the amount in the ledger A check mark usually is placed at the right of an amount After the checking of the postings has been completed look for

(a) Unchecked entries in the journal—see whether these items have been posted
(b) Unchecked entries in the ledger—see whether these items belong in the ledger it is possible that a journal entry has been posted twice that one ledger entry has been checked, and that the unchecked ledger entry indicates a duplicate posting

(5) See that the debit and credit amounts in each journal entry are equal

In looking for errors, be constantly on the watch for

Transpositions	—such as $79 85 posted as $78 95
Slides	—such as $ 75 posted as $75 00

Erasures should not be made in accounting records When an error is discovered, the incorrect amount or other item in the entry should be struck out by drawing a line through it, and the correct entry should be inserted above the incorrect one

Preparation of statements The trial balance on page 19 furnishes the information required for the preparation of the following statements

WHITE REALTORS CORPORATION
Statement of Income and Expense
For the Month of July, 19—

Commissions Earned	$700 00
Deduct Expenses	150 00
Net Income	$550 00

(This statement was prepared by using the balances of the Commissions Earned and Expense accounts)

WHITE REALTORS CORPORATION
Statement of Surplus
For the Month of July, 19—

Net Income	$550.00
Deduct Dividends	250.00
Surplus, July 31, 19—	$300 00

(This statement was prepared by using the amount of net income shown in the statement of income and expense, and the balance of the Dividends account.)

WHITE REALTORS CORPORATION
Balance Sheet
July 31, 19—

Assets		Liabilities and Net Worth		
Cash	$4,100.00	Liabilities:		
Accounts Receivable	200.00	Accounts Payable		$ 500.00
Office Furniture	1,500.00			
		Net Worth:		
		Capital Stock	$5,000.00	
		Surplus	300 00	5,300.00
	$5,800.00			$5,800.00

(This statement was prepared by using the balances of the asset, liability, and Capital Stock accounts, and the amount of surplus shown by the statement of surplus.)

Observe that:

The headings of the three statements illustrated above show the name of the company and the name of the statement.

The statement of income and expense and the statement of surplus show the results of operations during a period, and the heading of these statements shows the period.

The balance sheet shows the financial condition of the business on a stated date, and the heading shows the date.

CHAPTER 3

Working Papers

Working papers If a ledger contains very many accounts, it is desirable to prepare working papers in which the ledger account balances are classified in three pairs of columns, to indicate whether they are to be used in the preparation of

(1) The statement of income and expense, or
(2) The statement of surplus or
(3) The balance sheet

The following working papers were prepared from the trial balance of the ledger of White Realtors Corporation in Chapter 2

WHITE REALTORS CORPORATION
Working Papers
For the Month of July 19—

	Trial Balance		Income and Expense Statement		Surplus Statement		Balance Sheet	
Cash	4 100 00						4 100 00	
J H Duncan	200 00						200 00	
Office Furniture	1 500 00						1 500 00	
G H Baker		500 00						500 00
Capital Stock		5 000 00						5 000 00
Commissions Earned		700 00		700 00				
Expense	150 00		150 00					
Dividends	250 00				250 00			
	6 200 00	6 200 00						
Net Income for the Month			550 00			550 00		
			700 00	700 00				
Surplus July 31 19—					300 00			300 00
					550 00	550 00	5 800 00	5 800 00

If the ledger contains only a few accounts, the statements can be prepared without working papers

Preparation of working papers The foregoing working papers were prepared as follows

Step 1 Headings were written the ledger account balances were entered in the **Trial Balance** columns and these columns were totaled to determine their equality The working papers then appeared as shown on the following page

WHITE REALTORS CORPORATION
Working Papers
For the Month of July, 19—

	Trial Balance		*Income and Expense Statement*		Surplus Statement		Balance Sheet	
Cash	1,100.00							
J. H. Duncan	200.00							
Office Furniture	1,500.00							
G. H. Baker		500.00						
Capital Stock		5,000 00						
Commissions Earned		700.00						
Expense	150 00							
Dividends	250 00							
	6,200 00	6,200 00						

Step 2: Each account balance was entered in one of the columns at the right to indicate the statement in which it should appear. Debit balances were entered in a debit column, credit balances in a credit column. After the completion of this step, the working papers appeared as follows:

WHITE REALTORS CORPORATION
Working Papers
For the Month of July, 19—

	Trial Balance		Income and Expense Statement		Surplus Statement		Balance Sheet	
Cash	1,100 00						1,100 00	
J. H. Duncan	200.00						200.00	
Office Furniture	1,500 00						1,500.00	
G. H. Baker		500.00						500.00
Capital Stock		5,000.00						5,000.00
Commissions Earned		700.00		700.00				
Expense	150 00		150.00					
Dividends	250 00				250.00			
	6,200 00	6,200 00						

Step 3 The net income for the month in the amount of $550 00, was determined by computing the balance of the Income and Expense columns The $550 00 was entered in the debit Income and Expense column as a balancing figure since the net income increases the surplus the $550 00 was also entered in the Surplus credit column The two Income and Expense columns were then totaled and ruled After the completion of this step the working papers appeared as follows

WHITE REALTORS CORPORATION
Working Papers
For the Month of July 19—

	Trial Balance		Income and Expense Statement		Surplus Statement		Balance Sheet	
Cash	4 100 00						4 100 00	
J H Duncan	200 00						200 00	
Office Furniture	1 500 00						1 500 00	
G H Baker		500 00						500 00
Capital Stock		5 000 00						5 000 00
Commissions Earned		700 00		700 00				
Expense	150 00		150 00					
Dividends	250 00				250 00			
	6 200 00	6 200 00						
Net Income for the Month			550 00			550 00		
			700 00	700 00				

Step 4: The surplus at the end of the month, in the amount of $300.00, was determined by computing the balance of the two Surplus columns. The $300.00 was entered as a balancing figure in the Surplus debit column; since the surplus is to appear on the right side of the balance sheet, the $300.00 was also entered in the Balance Sheet credit column.

The two Surplus columns were totaled and ruled. The Balance Sheet columns were totaled, found to be in agreement, and ruled. If the Balance Sheet columns did not have the same totals, an error would be indicated.

After the completion of this step, the completed working papers appeared as follows:

WHITE REALTORS CORPORATION
Working Papers
For the Month of July, 19—

	Trial Balance		Income and Expense Statement		Surplus Statement		Balance Sheet	
Cash	4,100.00						4,100.00	
J. H. Duncan	200.00						200.00	
Office Furniture	1,500.00						1,500.00	
G. H. Baker		500.00						500.00
Capital Stock		5,000.00						5,000.00
Commissions Earned		700.00		700.00				
Expense	150.00		150.00					
Dividends	250.00				250.00			
	6,200.00	6,200.00						
Net Income for the Month			550.00			550.00		
			700.00	700.00				
Surplus, July 31, 19—					300.00			300.00
					550.00	550.00	5,800.00	5,800.00

Statements prepared from working papers. The following statement of income and expense contains the items appearing in the Income and Expense Statement columns of the working papers.

WHITE REALTORS CORPORATION
Statement of Income and Expense
For the Month of July, 19—

Income from Commissions	$700 00
Deduct Expenses	150 00
Net Income	$550 00

The following statement of surplus contains the items appearing in the Surplus Statement columns of the working papers:

WHITE REALTORS CORPORATION X'8F
Statement of Surplus
For the Month of July, 19—

Net Income for the Month	$550 00
Deduct Dividends	250 00
Surplus, July 31 19—	$300 00

The following balance sheet contains the items appearing in the Balance Sheet columns of the working papers: H9

WHITE REALTORS CORPORATION
Balance Sheet 55491
July 31, 19—

Assets		Liabilities and Net Worth		
Cash	$4,100 00	Liabilities		
Accounts Receivable	200 00	Accounts Payable		$ 500 00
Office Furniture	1,500 00			
		Net Worth		
		Capital Stock	$5,000 00	
		Surplus	300 00	$5 300 00
	$5 800 00			$5,800 00

CHAPTER 4

Closing the Books

Closing accounts showing changes in surplus. The income, expense, and dividend accounts are intended to show the changes in surplus *during a period*, and their balances are used in the statement of income and expense and the statement of surplus for the period. After these statements have been prepared, these accounts have served their purpose, and the net increase or decrease in surplus shown by their balances may be transferred to a Surplus account by a process called *closing the books* or *closing the ledger*.

In actual business it is not customary to close the books more often than once a year. Very many businesses close their books on December 31. There is, however, a growing tendency to adopt, for bookkeeping purposes, a fiscal year ending at some other date; the fiscal year-end adopted is usually a date when business operations are at a low ebb.

In many of the problems and practice sets in this text, the books are closed monthly. This is done because it is desired to give you training in the procedure of closing the books without requiring you to record transactions for an entire year.

Closing income and expense accounts. The income and expense accounts are closed by making and posting journal entries which transfer the balances of these accounts to a new account called Profit and Loss. The credit balances of income accounts are closed to the credit of Profit and Loss; the debit balances of expense accounts are closed to the debit of Profit and Loss; the credit balance of the Profit and Loss account then shows the net income for the period.

The first entry to close the books of White Realtors Corporation at the end of July transfers the credit balance of the Commissions Earned account to the credit of Profit and Loss. The journal entry is as follows:

Journal (Page 2)

19—					
July	31	Commissions Earned	6	700 00	
		Profit and Loss	9		700 00
		To close the Commissions Earned account.			

The account numbers in the folio column of the journal show that the postings have been made.

The two accounts* affected by the journal entry on the preceding page appear as follows

Commissions Earned (Page 6)

19—					19—					
July	*31*	*To P & L*	*2*	*700 00*	July	15		1	400	00
						20		1	300	00
				700 00					700	00

Profit and Loss (Page 9)

					19					
					July	*31*	*Commissions*	*2*	*700*	*00*

The Commissions Earned account has now been closed that is, it has no balance Its former credit balance of $700 00 has been transferred to the credit of Profit and Loss

The next journal entry closes the Expense account

Journal (Page 2)

31	Profit and Loss	9	150 00	
	Expense	7		150 00
	To close the Expense account.			

The two accounts affected by this journal entry appear as follows

Expense (Page 7)

19—					*19—*				
July	28	Office rent	1	150 00	*July*	*31*	*To P & L*	*2*	*150 00*

Profit and Loss (Page 9)

19—					19—				
July	*31*	*Expense*	*2*	*150 00*	July	31	Commissions	2	700 00

The Expense account has been closed its former debit balance has been transferred to the debit of Profit and Loss

The Profit and Loss account has a credit balance of $550 00 representing the net income for the month

The effect of these closing entries is shown graphically below The amounts of the closing entries are shown in italics The numbers in parentheses indicate the sequence in which the entries are made

Expense

150	*150*

(2)

Commissions Earned

700	400
	300

(*1*)

Profit and Loss

150	*700*

* In the following ledger accounts, the debits and credits resulting from posting the preceding journal entry are printed in italics as an aid in identifying them.

You should observe the method of ruling closed accounts. In the Commissions Earned account, note the single rulings on the same line in the debit and credit money columns, the totals, and the double rulings in three places on the line below the totals. Since the Expense account contains only one entry on each side, totals are unnecessary, and the account is ruled with double lines only.

Single rulings extend across the money columns only, whereas the double rulings extend across the date, folio, and money columns.

Closing the Profit and Loss and Dividends accounts. During July the surplus was increased by the net income and decreased by the dividends. To show these increases and decreases in surplus, the balances in the Profit and Loss and Dividends accounts are closed to a Surplus account.

The following journal entry closes the Profit and Loss account.

Journal (Page 2)

	31	Profit and Loss . . .	9	550 00	
		Surplus......	10		550 00
		To close the Profit and Loss account.			

The two accounts affected appear as follows:

Profit and Loss (Page 9)

19—					19—					
July	31	Expense	2	150 00	July	31	Commissions	2	700 00
	31	*To Surplus*	2	*550 00*						
				700 00					700 00

Surplus (Page 10)

					19—				
					July	*31*	*Net income*	*2*	*550 00*

The following journal entry closes the Dividends account.

Journal (Page 2)

	31	Surplus..... .	10	250 00	
		Dividends...	8		250 00
		To close the Dividends account.			

The two accounts affected appear as follows:

Dividends (Page 8)

19—					*19—*				
July	31		1	250 00	*July*	*31*	*To Surplus*	*2*	*250 00*

Surplus (Page 10)

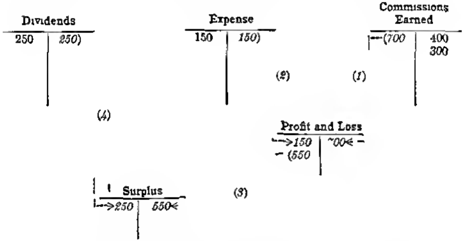
19—					19—				
July	*31*	*Dividends*	*2*	*250 00*	July	31	Net income	2	550 00

All the accounts showing changes in surplus during July have now been closed, and the $300 00 credit balance in the Surplus account represents the surplus at the end of July

Summary of closing entries. The procedure of closing the income, expense, and dividend accounts is summarized as follows

- Close the income and expense accounts to a Profit and Loss account The balance of the Profit and Loss account then shows the net income *for the period*
- Close the Profit and Loss account and the Dividends account to Surplus The balance of the Surplus account then shows the accumulated, undistributed profits *at the end of the period*

The complete closing procedure is shown graphically below



The journal page containing all the closing entries is shown below

Journal (Page 2)

19—					
July	31	Commissions Earned	6	700 00	
		Profit and Loss	9		700 00
		To close the Commissions Earned account			
	31	Profit and Loss	9	150 00	
		Expense	7		150 00
		To close the Expense account			
	31	Profit and Loss	9	550 00	
		Surplus	10		550 00
		To close the Profit and Loss account			
	31	Surplus	10	250 00	
		Dividends	8		250 00
		To close the Dividends account			

Ledger. To indicate as clearly as possible the effect of closing the books, the accounts of White Realtors Corporation are shown below. They are given in two groups:

(1) Accounts which remain open after the books are closed.
(2) Accounts which have no balances after the books are closed.

Accounts which remain open after the books are closed:

Asset Accounts

Cash (Page 1)

19—					19—				
July	1		1	5,000 00	July	10		1	1,000 00
	15		1	400 00		28		1	150 00
	24		1	100 00		31		1	250 00

J. H. Duncan (Page 2)

19—					19—				
July	20		1	300 00	July	24		1	100 00

Office Furniture (Page 3)

19—									
July	3		1	1,500 00					

Liability Account

G. H. Baker (Page 4)

19—					19—				
July	10		1	1,000 00	July	3		1	1,500 00

Net Worth Accounts

Capital Stock (Page 5)

					19—				
					July	1		1	5,000 00

Surplus (Page 10)

19—					19—				
July	31	Dividends	2	250 00	July	31	Net Income	2	550 00

Accounts with no balances after the books are closed:

Commissions Earned (Page 6)

19—					19—				
July	31	To P. & L.	2	700 00	July	15		1	400 00
						28		1	300 00
				700 00					700 00

Expense (Page 7)

19—					19—				
July	28		1	150 00	July	31	To P. & L.	2	150 00

Dividends (Page 8)

Date		Item	Folio	Amount	Date		Item	Folio	Amount
19— July	31		1	250 00	19— July	31	To Surplus	2	250 00

Profit and Loss (Page 9)

Date		Item	Folio	Amount	Date		Item	Folio	Amount
19— July	31	Expense	2	150 00	19— July	31	Commissions	2	700 00
	31	Net Income—To Surplus	2	550 00					
				700 00					700 00

Before the books are closed

- The balance in the Surplus account shows any surplus which may have existed at the beginning of the period
- The balances in the income, expense, and dividend accounts show the changes in surplus during the period

After the books are closed

- The balance in the Surplus account shows the surplus at the end of the period
- The income, expense, and dividend accounts have no balances They are therefore ready to record the changes in surplus during a subsequent period

Trial balance after closing After the books have been closed, it is advisable to take an *after closing* trial balance, to be sure that the equality of debits and credits in the ledger has not been destroyed by errors in closing the books The trial balance of White Realtors Corporation after closing on July 31 is shown below

WHITE REALTORS CORPORATION
After Closing Trial Balance
July 31, 19—

Cash	4 100 00	
J H Duncan	200 00	
Office Furniture	*1 500 00*	
G H Baker		500 00
Capital Stock		5 000 00
Surplus		300 00
	5 800 00	5 800 00

Accounts of subsequent periods. Before the books of White Realtors Corporation are closed at the end of *August*, the Surplus account will show the surplus on *July 31*, as follows

Surplus (Page 10)

Date		Item	Folio	Amount	Date		Item	Folio	Amount
19— July	31	Dividends	2	250 00	19— July	31	Net Income	2	550 00

Since the income, expense, and dividend accounts were closed at the end of July, their balances on August 31 will show the changes in surplus during August. To illustrate, let us assume that these accounts appear as follows:

Commissions Earned (Page 6)

19—					19—				
July	31	To P. & L.	2	700 00	July	15		1	400 00
						20		1	300 00
				700 00					700 00
					Aug.	9		3	275 00
						22		3	400 00

Expense (Page 7)

19—					19—				
July	28	Office rent	1	150 00	July	31	To P. & L.	2	150 00
Aug.	13	Supplies	3	16 00					
	28	Office rent	3	150 00					

Dividends (Page 8)

19—					19—				
July	31		1	250 00	July	31	To Surplus	2	250 00
Aug.	31		3	250 00					

Statements. The following statement of income and expense shows the net income for August.

WHITE REALTORS CORPORATION
Statement of Income and Expense
For the Month of August, 19—

Income from Commissions	$675.00
Deduct Expenses	166.00
Net Income	$509.00

The following statement of surplus shows the surplus at the beginning of August (per the balance of the Surplus account), the changes during the month, and the surplus at the end of the month.

WHITE REALTORS CORPORATION
Statement of Surplus
For the Month of August, 19—

Surplus, July 31, 19— . . .	$300.00
Add Net Income for the Month . . .	509.00
Total.	$809.00
Deduct Dividends.	250.00
Surplus, August 31, 19—.	$559.00

After these statements and the balance sheet have been prepared, the accounts can again be closed by journal entries similar to those made at the end of July The balance in the Surplus account will then show the surplus at the end of August

Sequence of accounting procedures The various accounting procedures explained in this and the preceding chapters are performed in the following sequence

- Journalize
- Post
- Take a trial balance
- Prepare working papers (this is optional if there are only a few accounts, experienced bookkeepers do not make working papers, since the statements can easily be prepared without them)
- Prepare a statement of income and expense for the period
- Prepare a statement of surplus for the period
- Prepare a balance sheet showing the financial condition at the end of the period
- Make and post the journal entries necessary to close the books
- Take an after-closing trial balance

Many companies prepare statements monthly, but close the books only once a year In such cases, the procedure is as follows

Monthly routine

> Journalize post take a trial balance prepare working papers prepare a statement of income and expense, a statement of surplus, and a balance sheet

At the end of the year

> Make and post the journal entries necessary to close the books take an after-closing trial balance

Punctuating numbers When numbers are written on columnar ruled paper, it is unnecessary to indicate decimal locations by using commas and periods, the rulings accomplish this purpose Numbers written on paper which does not have money column rulings should be punctuated, thus 2,356 457 87

Use of zeros and dashes In books of original entry, ledger accounts, trial balances, and working papers the use of two zeros or a dash in the cents column is a matter of choice Thus, an amount may be written 1 257 00 or 1 257—. Many bookkeepers feel that

a dash is more easily written than two zeros, and that the use of dashes facilitates the addition of the cents column.

In balance sheets and other statements it is preferable, for the sake of appearance, to use zeros.

Dollar signs. Dollar signs need not be written in books of original entry, ledger accounts, trial balances, and working papers. They should be used in balance sheets and other formal statements. In such statements, a dollar sign should be written:

> Beside the first amount in each column. Look at the balance sheet on page 21 and observe the dollar signs in \$4,100.00, \$500.00, and \$5,000.00.
>
> Beside each amount appearing below an underline. Look at the statement of surplus on page 33 and observe the dollar signs in \$809.00 and in \$559.00.

Red ink. Bookkeepers formerly used red ink for any rulings in books of original entry and ledger accounts. This practice is now becoming obsolete.

Cost of goods sold. The foregoing statement does not show the computation of the cost of goods sold. The cost of goods sold is computed by deducting the merchandise inventory at the end of the period from the cost of merchandise available for sale.

If we assume that there was no inventory at the beginning of the period, the only goods available for sale would be those purchased during the period. The profit and loss statement, expanded to show the computation of the cost of goods sold, would appear as follows:

THE DOUGLASS COMPANY
Statement of Profit and Loss
For the Month of November, 19—

Sales		$35,000.00
Deduct Cost of Goods Sold:		
Purchases	$30,000.00	
Deduct Inventory, November 30, 19—	5,000.00	
Cost of Goods Sold		25,000 00
Gross Profit on Sales		$10,000.00
Deduct Expenses		7,000.00
Net Profit		$ 3,000.00

If we assume that there was an inventory at the beginning of the period, the goods available for sale would include the inventory at the beginning of the period and the purchases during the period. The cost of goods sold would be computed as shown below:

THE MORTON COMPANY
Statement of Profit and Loss
For the Month of September, 19—

Sales		$3,350.00
Deduct Cost of Goods Sold:		
Inventory, September 1, 19—	$1,000.00	
Purchases	2,700.00	
Total	$3,700.00	
Deduct Inventory, September 30, 19—	1,150.00	
Cost of Goods Sold		2,550 00
Gross Profit on Sales		$ 800.00
Deduct Expenses		200 00
Net Profit for the Month		$ 600.00

Information required. For the preparation of the foregoing statement of profit and loss of The Morton Company, it was necessary to have the following information:

Sales	$3,350.00
Inventory, September 1	1,000 00
Purchases	2,700.00
Inventory, September 30	1,150.00
Expenses	200 00

Since we are already familiar with the Expense account, we have to consider only four new items, which will be discussed in the following order Inventory at the beginning of the period, Purchases, Sales, Inventory at the end of the period.

Beginning inventory. The debit balance in the following account represents the asset of merchandise owned by The Morton Company on September 1 the debit was made in this account at the beginning of the month.

Inventory

19—									
Sept.	1		1	1 000 00					

Purchases Purchases increase the merchandise asset, therefore, purchases are recorded by debits, as in the following account

Purchases

19—									
Sept	3		1	1,500 00					
	7		1	1,200 00					

Sales Sales are recorded by debits to Cash or to customers' accounts and by credits to the Sales account The following account contains a record of the sales of The Morton Company for the month of September

Sales

					19—				
					Sept.	18		1	2 000 00
						25		1	1,350 00

Ending inventory At the end of the period it is necessary to determine the value of the inventory on hand by counting, weighing, or otherwise measuring the merchandise, and by pricing it This procedure is called *taking inventory*

Illustrative transactions Following are the transactions of The Morton Company for the month of September

Sept. 1—The stockholders invested $4 000 00 cash and merchandise valued at $1 000 00, in exchange for capital stock of a par value of $5,000 00

3—Merchandise costing $1,500 00 was purchased for cash.

7—Merchandise costing $1,200 00 was purchased from George White on account

18—A $2 000 00 sale of merchandise was made for cash.

25—Merchandise was sold to E. F. Bailey on account, $1,350.00.

26—A cash payment of $500.00 was made to George White on account.

27—A cash collection of $750.00 was received from E. F. Bailey, to apply on account.

28—The store rent for the month, $200.00, was paid in cash.

30—A cash dividend of $250.00 was paid to the stockholders.

Transactions journalized. Following is the journal containing a record of the transactions just listed. (The first journal entry is a compound entry; a compound journal entry contains more than a single debit and credit.)

Journal (Page 1)

19—					
Sept.	1	Cash		4,000 00	
		Inventory		1,000 00	
		Capital Stock			5,000 00
		Investment by stockholders.			
	3	Purchases		1,500 00	
		Cash			1,500 00
		Cash purchase of merchandise.			
	7	Purchases		1,200 00	
		George White			1,200 00
		Purchase of merchandise from George White on account.			
	18	Cash		2,000 00	
		Sales			2,000 00
		Cash sale of merchandise.			
	25	E. F. Bailey		1,350 00	
		Sales			1,350 00
		Sale of merchandise on account.			
	26	George White		500 00	
		Cash			500 00
		Payment to White to apply on account.			
	27	Cash		750 00	
		E. F. Bailey			750 00
		Collection from Bailey on account.			
	28	Expense		200 00	
		Cash			200 00
		Payment of store rent.			
	30	Dividends		250 00	
		Cash			250 00
		Payment of dividend to stockholders.			

Ledger accounts The following ledger accounts were produced by posting the foregoing journal entries

Cash (Page 1)

19—					19—				
Sept	1		1	4 000 00	Sept	3		1	1 500 00
	18		1	2 000 00		26		1	500 00
	27		1	750 00		28		1	200 00
						30		1	250 00

E F Bailey (Page 2)

19—					19—				
Sept	25		1	1 350 00	Sept	27		1	750 00

Inventory (Page 3)

19—									
Sept	1		1	1 000 00					

George White (Page 4)

19—					19—				
Sept	26		1	500 00	Sept	7		1	1 200 00

Capital Stock (Page 5)

					19—				
					Sept	1		1	5 000 00

Purchases (Page 6)

19—									
Sept	3		1	1 500 00					
	7		1	1 200 00					

Sales (Page 7)

					19—				
					Sept	18		1	2 000 00
						25		1	1 350 00

Expense (Page 8)

19—									
Sept	28		1	200 00					

Dividends (Page 9)

19—									
Sept	30		1	250 00					

Working papers. The working papers on page 42 were prepared as follows:

(1) The statement heading and the column headings were written.
(2) The trial balance was entered.
(3) Each balance in the trial balance was extended to one of the Profit and Loss, Surplus, or Balance Sheet columns.
(4) The inventory at the end of the period was entered in the Profit and Loss credit and the Balance Sheet debit columns.
(5) The net profit for the month was entered in the Profit and Loss debit column as a balancing figure, and in the Surplus credit column.
(6) The Profit and Loss columns were footed and ruled.
(7) The surplus at the end of the month, $350.00, was entered in the Surplus debit column as a balancing figure, and in the Balance Sheet credit column.
(8) The Surplus columns and the Balance Sheet columns were footed and ruled.

In order to indicate clearly that the items entered in the Profit and Loss columns of the working papers are those required to be used in the computation of the net profit, these items are shown below in a somewhat different order than that in which they appear in the working papers.

	Profit and Loss Statement Columns	
	Debit	Credit
Inventory, September 1	1,000.00	
Purchases	2,700.00	
The total of these two items represents the cost of goods available for sale.		
Inventory, September 30		1,150.00
The Profit and Loss columns now have a debit balance of $2,550.00, representing the cost of goods sold.		
Sales		3,350.00
The Profit and Loss columns now have a credit balance of $800.00, representing the gross profit on sales.		
Expense	200.00	
The Profit and Loss columns now have a credit balance of $600.00, representing the net profit for the month. The columns are balanced as follows:		
Net Profit	600.00	
	4,500.00	4,500.00

Statements from working papers. The statements on page 43 were prepared from the working papers on page 42.

THE MORTON COMPANY
Working Papers
For the Month of September, 19—

	Trial Balance		Profit and Loss Statement		Surplus Statement		Balance Sheet	
Cash	4,300 00						4,300 00	
E F Bailey	600 00						600 00	
Inventory (September 1)	1,000 00		1,000 00					
George White		700 00						700 00
Capital Stock		5,000 00						5,000 00
Purchases	2,700 00		2,700 00					
Sales		3,350 00		3,350 00				
Expense	200 00		200 00					
Dividends	250 00				250 00			
	9,050 00	9 050 00						
Inventory, September 30				1,150 00			1,150 00	
Net Profit			600 00			600 00		
			4,500 00	4,500 00				
Surplus, September 30					350 00			350 00
					600 00	600 00	6 050 00	6 050 00

THE MORTON COMPANY
Statement of Profit and Loss
For the Month of September, 19—

Sales		$3,350 00
Deduct Cost of Goods Sold:		
Inventory, September 1, 19—	$1,000.00	
Purchases	2,700.00	
Total	$3,700.00	
Deduct Inventory, September 30, 19—	1,150.00	
Cost of Goods Sold		2,550.00
Gross Profit on Sales		$ 800.00
Deduct Expenses		200.00
Net Profit		$ 600.00

THE MORTON COMPANY
Statement of Surplus
For the Month of September, 19—

Net Profit for the Month	$ 600.00
Deduct Dividends	250 00
Surplus, September 30, 19—	$ 350.00

THE MORTON COMPANY
Balance Sheet
September 30, 19—

Assets		Liabilities and Net Worth		
Cash	$4,300 00	Liabilities:		
Accounts Receivable	600.00	Accounts Payable		$ 700.00
Inventory	1,150.00			
		Net Worth:		
		Capital Stock	$5,000.00	
		Surplus	350.00	5,350 00
	$6,050 00			$6,050 00

Closing the books. Closing the books of a merchandising company accomplishes two things: (1) All accounts used in determining the net income for the period, and any other accounts (such as Dividends) showing changes in surplus during the period, are closed; (2) The inventory at the end of the period is entered in the books as an asset.

The journal entries to close the books of The Morton Company on September 30 are shown on pages 44 and 46, and the ledger accounts affected by the closing entries are shown on pages 45 and 47 opposite the journal entries. After reading each journal entry, look at the opposite page and observe how the accounts are affected.

The order in which the accounts are closed is, to a certain extent, a matter of personal preference. In the illustration, they are closed in the order in which they appear in the profit and loss statement.

Closing the Sales account

19—					
Sept	30	Sales	7	3 350 00	
		Profit and Loss	10		3 350 00
		To close the Sales account			

Closing the Inventory account

	30	Profit and Loss	10	1 000 00	
		Inventory	3		1 000 00
		To charge Profit and Loss with the inventory at the beginning of the period			

Closing the Purchases account

	30	Profit and Loss	10	2 700 00	
		Purchases	6		2 700 00
		To close the Purchases account			

Recording the inventory at the end of the period

This entry places the September 30 inventory on the books as an asset, with an offsetting credit to Profit and Loss The credit to Profit and Loss represents a deduction from the opening inventory and purchases costs which were debited to that account

	30	Inventory	3	1 150 00	
		Profit and Loss	10		1 150 00
		To place the September 30 inventory on the books as an asset, and to credit Profit and Loss with the amount thereof			

Sales (Page 7)

19—					19—				
Sept.	30	To P. & L.	2	3,350 00	Sept.	18		1	2,000 00
						25		1	1,350 00
				3,350 00					3,350 00

Profit and Loss (Page 10)

					19—				
					Sept.	30	Sales	2	3,350 00

Inventory (Page 3)

19—					19—				
Sept.	1		1	1,000 00	Sept.	30	To P. & L.	2	1,000 00

Profit and Loss (Page 10)

19—					19—				
Sept.	30	Inv., Sept. 1	2	1,000 00	Sept.	30	Sales	2	3,350 00

Purchases (Page 6)

19—					19—				
Sept.	3		1	1,500 00	Sept.	30	To P. & L.	2	2,700 00
	7		1	1,200 00					
				2,700 00					2,700 00

Profit and Loss (Page 10)

19—					19—				
Sept.	30	Inv., Sept. 1	2	1,000 00	Sept.	30	Sales	2	3,350 00
	30	Purchases	2	2,700 00					

Inventory (Page 3)

19—					19—				
Sept.	1		1	1,000 00	Sept.	30	To P. & L.	2	1,000 00
Sept.	30		2	1,150 00					

Profit and Loss (Page 10)

19—					19—				
Sept.	30	Inv., Sept. 1	2	1,000 00	Sept.	30	Sales	2	3,350 00
	30	Purchases	2	2,700 00		30	Inv., Sept. 30	2	1,150 00

Closing the Expense account.

19—					
Sept	30	Profit and Loss	10	200 00	
		Expense	8		200 00
		To close the Expense account			

Closing the Profit and Loss account

	30	Profit and Loss	10	600 00	
		Surplus	11		600 00
		To transfer the net profit to Surplus			

Closing the Dividends account

	30	Surplus	11	250 00	
		Dividends	9		250 00
		To close the Dividends account			

Expense (Page 8)

19—					19—				
Sept.	28		1	200 00	Sept.	30	To P. & L.	2	200 00

Profit and Loss (Page 10)

19—					19—				
Sept.	30	Inv., Sept. 1	2	1,000 00	Sept.	30	Sales	2	3,350 00
	30	Purchases	2	2,700 00		30	Inv., Sept. 30	2	1,150 00
	30	Expense	2	200 00					

Profit and Loss (Page 10)

19—					19—				
Sept.	30	Inv., Sept. 1	2	1,000 00	Sept.	30	Sales	2	3,350 00
	30	Purchases	2	2,700 00		30	Inv., Sept. 30	2	1,150 00
	30	Expense	2	200 00					
	30	To Surplus	2	600 00					
				4,500 00					4,500 00

Surplus (Page 11)

					19—				
					Sept.	30	Net Profit	2	600 00

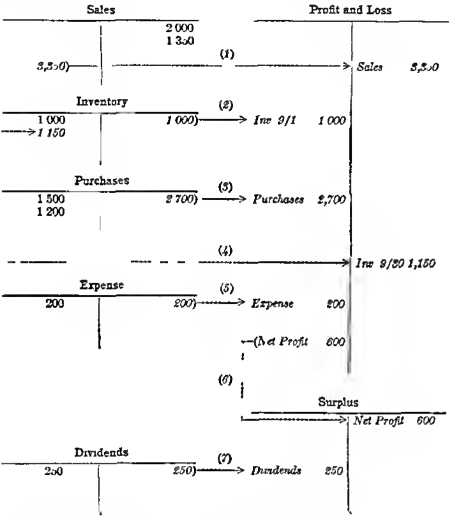
Dividends (Page 9)

19—					19—				
Sept.	30		1	250 00	Sept.	30	To Surplus	2	250 00

Surplus (Page 11)

19—					19—				
Sept.	30	Dividends	2	250 00	Sept.	30	Net Profit	2	600 00

The procedure of closing the books of a merchandising company is shown graphically below The closing entries are printed in italics The numbers indicate the sequence in which the entries are made



Ledger accounts Following are the ledger accounts after the books are closed

Accounts not affected by closing entries

Cash (Page 1)

19—					19—				
Sept.	1		1	4 000 00	Sept.	3		1	1 500 00
	18		1	2 000 00		26		1	500 00
	27		1	750 00		28		1	200 00
						30		1	250 00

E. F. Bailey (Page 2)

Date		Item	F	Amount	Date		Item	F	Amount
19—					19—				
Sept.	25		1	1,350 00	Sept.	27		1	750 00

George White (Page 4)

Date		Item	F	Amount	Date		Item	F	Amount
19—					19—				
Sept.	26		1	500 00	Sept.	7		1	1,200 00

Capital Stock (Page 5)

Date		Item	F	Amount	Date		Item	F	Amount
					19—				
					Sept.	1		1	5,000 00

Accounts affected by closing entries:

Inventory (Page 3)

Date		Item	F	Amount	Date		Item	F	Amount
19—					19—				
Sept.	1		1	1,000 00	Sept.	30	To P. & L.	2	1,000 00
Sept.	30		2	1,150 00					

Purchases (Page 6)

Date		Item	F	Amount	Date		Item	F	Amount
19—					19—				
Sept.	3		1	1,500 00	Sept.	30	To P. & L.	2	2,700 00
	7		1	1,200 00					
				2,700 00					2,700 00

Sales (Page 7)

Date		Item	F	Amount	Date		Item	F	Amount
19—					19—				
Sept.	30	To P. & L.	2	3,350 00	Sept.	18		1	2,000 00
						25		1	1,350 00
				3,350 00					3,350 00

Expense (Page 8)

Date		Item	F	Amount	Date		Item	F	Amount
19—					19—				
Sept.	28		1	200 00	Sept.	30	To P. & L.	2	200 00

Dividends (Page 9)

Date		Item	F	Amount	Date		Item	F	Amount
19—					19—				
Sept.	30		1	250 00	Sept.	30	To Surplus	2	250 00

Profit and Loss (Page 10)

Date		Item	F	Amount	Date		Item	F	Amount
19—					19—				
Sept.	30	Inv., Sept. 1	2	1,000 00	Sept.	30	Inv., Sept. 30	2	1,150 00
	30	Purchases	2	2,700 00		30	Sales	2	3,350 00
	30	Expense	2	200 00					
	30	To Surplus	2	600 00					
				4,500 00					4,500 00

Surplus (Page 11)

Date		Item	F	Amount	Date		Item	F	Amount
19—					19—				
Sept.	30	Dividends	2	250 00	Sept.	30	Net Profit	2	600 00

Net loss for period. If the expenses exceed the gross profit for the period, the statement of profit and loss will appear as illustrated below

THE A B COMPANY
Statement of Profit and Loss
For the Month of February, 19—

Sales		$5,000 00
Deduct Cost of Goods Sold		
Inventory, February 1, 19—	$1,000 00	
Purchases	4,300 00	
Total	$5 300 00	
Deduct Inventory February 28, 19—	800 00	
Cost of Goods Sold		4 500 00
Gross Profit on Sales		$ 500 00
Deduct Expenses		600 00
Net Loss		$ 100 00

Since the operations resulted in a loss, the Profit and Loss account will have a debit balance, and will be closed by an entry debiting Surplus and crediting Profit and Loss

In the working papers, the Profit and Loss columns will be balanced by entering the net loss in the credit column The net loss will also be entered in the debit Surplus column

Loss on sales. If the cost of goods sold exceeds the sales, the operations will result in a loss on sales instead of in a gross profit, and the statement will be prepared as follows

THE X Y COMPANY
Statement of Profit and Loss
For the Month of July, 19—

Sales		$10 000 00
Deduct Cost of Goods Sold		
Inventory, July 1, 19—	$ 2 000 00	
Purchases	9,300 00	
Total	$11 300 00	
Deduct Inventory, July 31, 19—	1,100 00	
Cost of Goods Sold		10 200 00
Loss on Sales		$ 200 00
Add Expenses		500 00
Net Loss		$ 700 00

Nature of surplus and deficit. The net worth of a business is the excess of its assets over its liabilities To illustrate

If a business owns assets in the amount of	$45 000 00
And owes liabilities amounting to	15 000 00
Its net worth is	$30 000 00

The net worth of a corporation is shown in its balance sheet in two amounts, as illustrated below:

(1) If the company issued capital stock of $25,000.00, and subsequently increased its net worth $5,000.00 by profits, its net worth would be shown in the balance sheet thus:

Net Worth:		
Capital Stock . . .	$25,000.00	
Surplus	5,000.00	$30,000.00

(2) If the company issued capital stock of $40.000.00 and subsequently decreased its net worth $10,000.00 by losses, its net worth would be shown thus:

Net Worth:		
Capital Stock . . .	$40,000.00	
Deduct Deficit	10,000.00	$30,000.00

Office Routines; Documents

Duties of the accounting department. The work of the accounting department includes:

(1) Writing up various documents, such as sales invoices, checks, and notes. Most of these documents are delivered to the parties with whom the company does business: duplicates of some of these documents (duplicate sales invoices, for instance) may be retained in the company's files for future reference and as evidence of the propriety of the entries for the transactions.

(2) Checking similar documents received from the parties with whom the company does business to determine whether or not they have been prepared in accordance with the facts of the transactions. After having been checked, the documents are filed as evidence of the transactions.

(3) Recording the transaction facts indicated by the documents written up in the office or received from other parties.

Internal control. The office and accounting procedure should be so organized that errors will be prevented so far as possible, and that, if errors are made (either by the company's employees or by employees of the people with whom the company does business), they probably will be discovered. Moreover, the work of the various members of the organization should be so interrelated and checked that fraud cannot be committed and concealed without the collusion of two or more persons. The method of effecting these safeguards is called the *system of internal check* or *internal control*. The procedures described in this chapter are typical.

Purchase Routine

Purchase requisitions In a large and well organized business, with a good system of internal control, all purchases are made by the purchasing agent, who obtains information concerning requirements from purchase requisitions sent to him by other members of the organization Requisition forms are of various kinds, the following is illustrative

R E. JOHNSON & COMPANY

Requisition No M135 Date July 2 19

Please purchase for delivery before July 6

Quantity	Description
10 cases	XXXX Strawberry preserves
15 cases	Acorn Peanut butter
10 cases	Acorn peas

Requisitioned by C. E. Walters Approved by J. E. White

Purchasing Agent's Memorandum of Order

Purchase Order No 1705 Issued to The Osborne Co

Date of Order July 2 Chicago

Purchase Requisition

Purchase requisitions may be filled out by various persons depending on the nature of the business and the size of the organization

In the case of staple merchandise, the merchandise manager may fix a minimum quantity below which the stock must not be allowed to fall without reordering When the stock is reduced to the minimum quantity determined by the merchandise manager, the stock clerk enters the description of the article on a requisition he may also enter the quantity to be ordered (if a standard quantity to be purchased has been established), or the quantity may be entered on the requisition by the merchandise manager

In the case of nonstaple merchandise, the requisition may be prepared in the office of the merchandise manager, after consultation with the sales manager regarding quantities which probably will be required.

Purchase order. The purchasing agent places the order by filling out a purchase order. Purchase orders vary in form; the following is illustrative.

Purchase Order No. 1705

R. E. JOHNSON & COMPANY
2913 North Western Avenue
Chicago

To The Osborne Company
215 West Canal Street
Chicago

Date July 2, 19--
Deliver Before July 6
Ship via Your truck
F. O B
Terms 1/10; n/30

Quantity	Description	Price
10 cases	XXXX Strawberry Preserves	13.90
15 cases	Acorn Peanut Butter	4.60
10 cases	Acorn Peas	6.20

R. E. Johnson & Company

Req. No. M135

By L K Bacon
Purchasing Agent

Purchase Order

Three copies of the purchase order may be made, and disposed of as follows:

Original—sent to the supplier from whom the goods are being purchased.
First carbon—retained in the purchasing department files.
Second carbon—sent to the receiving department.

The uses subsequently made of the first and second carbon copies of the purchase order are described in a subsequent section of this chapter Briefly it may be stated here that, when the goods and the invoice are received from the seller, a clerk in the purchasing department checks the invoice against the first carbon copy of the purchase order to see that they are in agreement as to the nature and quantities of the merchandise, the prices, and the discount and freight terms The second copy is used by the receiving clerk when the goods are received

Invoice The purchaser receives an invoice from the seller The invoice describes the merchandise shipped, shows the amount charged therefor, and gives other important information An illustrative invoice appears below

THE OSBORNE COMPANY
215 West Canal Street
Chicago Illinois

Invoice No 2397

Customer s Order No 1705
Date of Order 7/2/19 *Invoice Date* July 3 19 -

Sold to R E Johnson & Company Terms 1/10 n/30
2913 North Western Ave
Chicago, Ill F O B

Shipped to Same Date Shipped July 3
How Shipped Truck
Car No & Initials

Quantity	Description	Unit Price	Amount
10 cases	XXXX Strawberry Preserves	13 90	139 00
15 cases	Acorn Peanut Butter	4 60	69 00
10 cases	Acorn Peas	6 20	62 00
			270 00

Invoice

Purchaser's verification of invoice. When the invoice is received, it is sent to the purchasing department, where a check sheet in the following general form is pasted to it, or a rubber stamp imprint of the same form is made on it.

Goods checked to invoice	__________
Invoice checked to purchase order for:	
Merchandise	__________
Prices	__________
Discount terms	__________
Freight terms	__________
Invoice footings and extensions checked	__________
Approved for payment	__________
Paid by Check No.__________Date__________	

Check Sheet

Before the purchase is recorded, the purchasing company should know that:

(1) The goods invoiced have been received.

The second carbon of the purchase order was sent to the receiving department. When the goods are received, the receiving clerk:

Inspects the merchandise to see that it is in good condition.

Counts, weighs, or otherwise determines the quantities received, and enters these quantities on his copy of the purchase order. This copy was made with a narrow carbon, so that the quantities ordered were not typed on it: such a practice assures a careful count by the receiving clerk instead of a perfunctory checking of typed quantities.

Initials the copy of the purchase order and sends it to the purchasing department, where it is filed in a binder called a *receiving record.*

A clerk in the purchasing department compares the quantities received (shown by the receiving record) with the quantities billed (shown by the invoice). If they agree, he initials the check sheet on the "Goods checked to invoice" line.

(2) The invoice agrees with the purchase order
The first carbon of the purchase order was retained in the purchasing department files A clerk checks the invoice against this carbon of the purchase order to see that the merchandise invoiced is the same as the merchandise ordered and that the prices the discount and the freight terms are correct He indicates the accuracy of these matters by initialing the check sheet on the four lines provided therefor

(3) The extensions and footings of the invoice are correct
The computations are checked by a clerk in the accounting department and their accuracy is indicated by his initials on the Invoice footings and extensions checked line of the check sheet

After the invoice has been checked an entry is made to record the *purchase*

Payment of the invoice The terms of the invoice received from The Osborne Company were 1/10 n/30 This is read as follows 1% in 10 days net 30 * It means that 1% cash discount will be allowed if the invoice is paid within ten days from its date July 3 and that the invoice is due in thirty days without discount

To be sure that all invoices are paid within the discount period they may be filed in a *tickler which is a card file* with index cards bearing dates The Osborne invoice will be filed behind the card for July 12 which is the date on which the check should be mailed to reach the creditor before the expiration of the discount period

When the payment date arrives the invoice is taken from the tickler and sent to the treasurer If there are funds available for the payment of the invoice the treasurer signs or initials the check sheet on the Approved for payment line and sends the invoice to the cashier who

(1) Draws a check

(2) Enters the check number and date of payment on the check sheet attached to the invoice

(3) Sends the check to the treasurer for his signature The check is clipped to the invoice so that the treasurer can be sure that the check he is signing is in payment of an approved invoice

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* The expression *net* is a misnomer because the gross amount of the invoice (not the net amount) is payable after 30 days

The treasurer signs the check and sees that it is mailed to the creditor. The invoice is sent to the bookkeeper, who records its payment. The invoice is then filed for future reference as evidence of the propriety of the entry for the purchase and the entry for the payment.

Checks, advices, and receipts. When a remittance is sent to a creditor, it is important to give the creditor information which will indicate the particular invoice which is being paid. A debtor may owe several bills; he has a legal right to specify that his remittance shall apply to a certain bill or certain bills, and the debtor's and the creditor's records should show which bills are being paid. It is also desirable to obtain a receipt from the creditor. Several methods may be used to accomplish these purposes; two methods in common use are described below:

(1) The check form may be a simple one, similar to the following *illustration:*

FIRST NATIONAL BANK 2-1 No 1553

Chicago, July 12, 19__

Pay to the order of The Osborne Company $267.30

EXACTLY $267 & 30 CTS. Dollars

R. E. Johnson & Company

Peter Oldham Treasurer

Check

When the purchaser sends the seller the check, he may send with it a letter, stating that the check is sent in payment of the creditor's invoice 2397 of July 3, in the amount of $270.00, less 1% cash discount.

This method has two disadvantages:

(a) It necessitates writing a letter.
(b) Although the creditor's endorsement of the check is a receipt for $267.30, it is not an acknowledgment of the payment of a particular invoice.

(2) Data with respect to the invoice that is being paid may be shown in a space provided for that purpose at the left of the check.

Date	Invoice	Amount
7/3/19	2397	270 00
Total		270 00
Discount		2 70
Net		267 30

FIRST NATIONAL BANK 2 1 No 1668

Chicago July 12 19

Pay to the order of The Osborne Company $267 30

EXACTLY $267 30 CTS Dollars

R E Johnson & Company

Peter Oldham

Treasurer

Check with Space for Data at Left

The back of the left end of the check contains the following or similar words Endorsement of this check by the payee shall constitute a receipt for the items described on the face thereof *A receipt for specific items is* thus obtained from the creditor

Sales Routine

Sales. The office and accounting procedures with respect to sales differ in retail and wholesale businesses they also depend on the nature and size of the business The procedures described in the following paragraphs are typical and illustrative but you should understand that, although they are indicative of methods of establishing internal control, other procedures may be used with equal effectiveness

In retail stores where the orders in most cases are oral the clerk may merely ring up the sale on the cash register If it is a charge sale, the salesman may make out a sales ticket in duplicate showing the name and the address of the customer and the items purchased, the original will be given to the customer and the duplicate will be sent to the bookkeeping department for entry in the records If the order is to be filled from stock in the storeroom, a third copy may be made for use in filling the order

In wholesale businesses most orders are received in written form from the company s salesmen or customers, the sales are made on account, and the goods are shipped or otherwise delivered to the customers The procedure may be somewhat as follows

(1) The order goes to the credit department for approval of the customer s credit rating If the approval is given,

(2) The order goes to a billing clerk who types an invoice in triplicate The three copies are used as follows

The second carbon is sent to the stock room for order filling, and thence (with the merchandise) to the

shipping room for packing and shipment. After the goods have been shipped, this copy of the invoice is initialed by the shipping clerk and sent to the accounting department, where it is filed, in invoice number sequence, in a binder which serves as a shipping record. Maintaining a record relative to the shipment of goods is important. In the first place, it serves as evidence of the propriety of the entry debiting the customer and crediting the Sales account; in the second place, if the goods are delayed or lost in transit, it furnishes information which may be of assistance in tracing the shipment or in substantiating a claim for loss.

The first carbon remains in the accounting department, where it is checked to determine that it is in agreement with the order, and that the prices, terms, and computations are correct. After the second carbon is returned to the accounting department (thus showing that the goods have been shipped), the first carbon is filed in a sales binder and used by the bookkeeper in making his entries.

The original is mailed to the customer after the goods are shipped.

Statements. In many, although not in all, lines of business, merchants send their customers monthly statements similar to the following:

Statement

R. E. JOHNSON & COMPANY
2913 North Western Avenue
Chicago

J. K. Larson,
Whitney, Oklahoma

July 31, 19--

Date	Charges	Credits	Balance
June 30			39.85
July 7	47.88		87.73
9		39.85	47.88
18	40.50		88.38

Such statements show

(1) The balance owed by the customer at the beginning of the month
(2) Charges to the customer during the month, for sales on account
(3) Credits to the customer during the month, for cash remittances, returns and allowances, and so forth
(4) The balance owed by the customer at the end of the month

CHAPTER 6

Expense and Income Accounts

Expenses. It is desirable to keep a number of expense accounts so that the people who are managing the business can easily see whether any particular expense is becoming excessive. Some of the expenses for which separate accounts may be kept are shown in the following partial profit and loss statement. The accounts kept by each business depend upon the kinds of expenses which the business incurs, and the amount of detailed information desired by the management.

In the statement of profit and loss, the balances of the various expense accounts may be classified in groups, as follows:

Selling expenses:

> These are incurred in advertising, selling, and delivering the merchandise.

General expenses:

> These are incurred in the general administration of the business. This classification of expenses is illustrated below.

Partial Profit and Loss Statement

Gross Profit on Sales		$20,000.00
Deduct Selling Expenses:		
Store Rent...	$5,000.00	
Advertising.......	2,500.00	
Salesmen's Salaries	9,000.00	
Total Selling Expenses.....		16,500.00
Net Profit on Sales		$12,500.00
Deduct General Expenses:		
Insurance..	$ 450.00	
Taxes.....	125.00	
Office Salaries..	2,500.00	
Office Expenses ..	3,260.00	
Total General Expenses.		6,335.00
Net Profit on Operations.....		$ 6,165.00

Transportation charges. Freight, express, and other transportation costs applicable to goods purchased are part of the cost of obtaining the goods: therefore, they are added to the purchases in the statement of profit and loss, as shown in the illustration on the following page.

Partial Profit and Loss Statement

Sales			$60 500 00
Deduct Cost of Goods Sold			
Inventory June 30 19		$115 700 00	
Purchases	$50 100 00		
Freight In	525 00	50 625 00	
Total		$166 325 00	
Deduct Inventory July 31 19—		117 320 00	
Cost of Goods Sold			49 005 00
Gross Profit on Sales		X SF	$11 495 00

Freight, express and other expenses incurred in delivering goods to customers should be shown in the profit and loss statement under the Selling Expenses caption H9

Freight terms Freight terms are expressed thus

F o b destination This means free on board cars at destination In other words the seller bears the freight charges

F o b shipping point This means that the seller bears the cost of putting the merchandise on board the cars, but the purchaser pays the freight charges

Returned sales and allowances Customers, after receiving merchandise sold to them, may 55491

(1) Return the goods because they are not of the kind or quality ordered When the returned goods are received, the selling company should make entries as follows

If the customer has paid for the goods and cash is returned to him

Returned Sales and Allowances	500 00	
Cash		500 00

If the customer is given credit for the returned goods

Returned Sales and Allowances	500 00	
Customer's name		500 00

(2) Request and receive an allowance on the price If an allowance is granted, the seller should make entries as follows

If cash is sent to the customer for the amount of the allowance

Returned Sales and Allowances	40 00	
Cash		40 00

If the customer is given credit for the allowance

Returned Sales and Allowances	40 00	
Customer's name		40 00

The notice sent to the customer that his account has been credited for a return or an allowance may be in the form of a letter, or a credit memorandum may be issued to him. A form for a credit memorandum is illustrated below:

R. E. JOHNSON & COMPANY
2013 North Western Avenue
Chicago

Credit Memo No. ______

____

______________________ Date ______________

____

We credit your account as follows:

Reason for Credit	Amount

R. E. Johnson & Company
Per ______________

Credit Memorandum

Credit memorandums should be made in duplicate. The original should be signed by an officer or an employee of the company and sent to the customer. The duplicate, which should be initialled by the person who signed the original (as evidence that the credit was properly authorized), should be filed in a credit memo binder for the bookkeeper's use in recording the allowance. The initialed copies of the credit memoranda also serve as evidence of the propriety of the entries crediting the customers and debiting Returned Sales and Allowances.

The debit balance in the Returned Sales and Allowances account should be shown in the profit and loss statement as a deduction from the gross sales, as illustrated below:

Partial Statement of Profit and Loss

Gross Sales	$5,000.00
Deduct Returned Sales and Allowances	350.00
Net Sales	$4,650.00

Returned purchases and allowances Goods purchased may be found unsatisfactory and may be returned Or the goods may be kept if the concern from which they were purchased grants an allowance from the purchase price Entries for purchase returns or allowances are illustrated below

Davis and Company	375 00	
Returned Purchases and Allowances		375 00
To charge Davis and Company for goods returned to them		

or,

Cash	50 00	
Returned Purchases and Allowance		50 00
To record return of goods to O borne Corporation and cash received therefor		

The credit balance of the Returned Purchases and Allowances account should be deducted in the profit and loss statement from the debit balance of the Purchases account, as illustrated below

Cost of Goods Sold		
Inventory August 31 19—		\$ 6 900 00
Add Net Cost of Purchases		
Purchases	\$3 215 00	
Deduct Returned Purchases and Allowances	122 00	
Net Purchases	\$3 093 00	
Add Freight In	275 00	3 368 00
Total Inventory and Purchases		\$10 268 00

Trade discounts Trade discounts are deductions from the list price allowed for various reasons, such as

(a) To avoid frequent publication of catalogues the prices can be changed merely by increasing or decreasing the discount rates

(b) To allow dealers a deduction from an advertised retail price, this practice is followed, for instance, by publishers whose advertisements state the retail prices of their books, dealers being allowed a discount from the published, or list, price

Trade discounts may be stated as a single rate or as a series of rates For instance, assume that the list price of merchandise is \$1,200 00 and that a trade discount of 35% is allowed, the net price is computed as follows

List price	\$1 200 00
Less trade discount—35% of \$1 200 00	420 00
Net price	\$ 780 00

Or, assume that the list price is $2,000.00. and that trade discounts of 30% and 10% are allowed; the net price is computed as follows:

List price	$2,000 00
First discount—30% of $2,000 00	600.00
Remainder after first discount	$1,400 00
Second discount—10% of $1,400 00	140 00
Net price	$1,260 00

No entries are made in the accounts for trade discounts; entries for purchases and sales are made at the net price. For instance, assume that James Benton purchased goods from Wharton and Company at a list price of $2,000.00, subject to trade discounts of 30% and 10%. Benton's entry would be:

Purchases	1,260 00	
Wharton and Company		1,260.00

and Wharton and Company would make the following entry:

James Benton	1,260 00	
Sales		1,260 00

Cash discounts. Cash discounts are deductions allowed to customers to induce them to pay their bills within a definite time. Cash discount terms are stated on the invoice in the following manner: 1/10; n/30.

If we refer to the preceding illustration in which Wharton and Company sold goods to James Benton, and assume that Benton paid the bill less a one per cent cash discount. Benton's entry would be:

Wharton and Company	1,260.00	
Discount on Purchases		12.60
Cash		1,247.40
To record payment of invoice of June 19, less 1% cash discount.		

and Wharton and Company's entry would be:

Cash	1,247.40	
Discount on Sales	12.60	
James Benton		1,260.00
To record collection of invoice of June 19, less 1% cash discount.		

Freight and cash discount. When merchandise is shipped f.o.b. destination, the seller agrees to bear the expense of the freight, and he usually pays the freight himself; but he may request the purchaser to pay the freight and deduct the amount thereof in making

his remittance In such cases the purchaser's remittance will be computed as follows

Gross amount of invoice	$100 00
Deduct cash discount—say 2%	2 00
Remainder	$ 98 00
Deduct freight paid for the seller	5 00
Remittance	$ 93 00

The purchaser's entries are

Purchases	100 00	
Bates and Company		100 00
Purchase of merchandise, f o b destination.		
Bates and Company	5 00	
Cash		5 00
Payment of freight at request of seller although terms were f o b destination.		
Bates and Company	95 00	
Discount on Purchases		2 00
Cash		93 00
Settlement for invoice less 2% discount.		

The seller's entries are

John Holmes	100 00	
Sales		100 00
Sale of merchandise f o b destination.		
Cash	93 00	
Freight Out	5 00	
Discount on Sales	2 00	
John Holmes		100 00
Settlement for invoice less freight and 2% cash discount.		

When merchandise is sold f o b shipping point, the seller may prepay the freight and charge it to the customer The seller's invoice will then show the charge for the merchandise (say $1,000 00) and the charge for the freight (say $25 00), or a total of $1,025 00 In making his remittance, the purchaser should take the cash discount on only the merchandise charge, thus

Invoice	$1 000 00
Deduct cash discount—say 1%	10 00
Remainder	$ 990 00
Add freight—paid by the seller for the purchaser	25 00
Total cash remittance	$1 015 00

The purchaser's entries are

Purchases	1 000 00	
Smith Corporation		1 000 00
Purchase of merchandise f o b shipping point		

Freight In	25.00	
Smith Corporation		25.00
To credit Smith Corporation for payment of freight.		
Smith Corporation	1,025.00	
Discount on Purchases		10.00
Cash		1,015.00
Payment for invoice less 1% cash discount, and freight.		

The seller's entries are:

Fred Henderson	1,000.00	
Sales		1,000.00
Sale of merchandise, f.o.b. shipping point.		
Fred Henderson	25.00	
Cash		25.00
Payment of freight for customer.		
Cash	1,015.00	
Discount on Sales	10.00	
Fred Henderson		1,025.00
Settlement for invoice less 1% discount, and freight.		

Cash discounts in the profit and loss statement. Since cash discounts reduce the amount received for sales and the amount paid for purchases, it would seem that discounts on sales *should be* deducted from the sales in the profit and loss statement, and that discounts on purchases *should be* deducted from the purchases. This procedure is illustrated below:

Partial Statement of Profit and Loss

Gross Sales				$23,560.00
Deduct:				
Returned Sales and Allowances			$ 365.00	
Discount on Sales			197.00	562.00
Net Sales				$22,998.00
Deduct Cost of Goods Sold:				
Inventory, May 31, 19—			$90,450.00	
Add Net Cost of Purchases:				
Gross Purchases		$17,500.00		
Deduct:				
Returned Purchases and Allowances	$235.00			
Discount on Purchases	315.00	550.00		
Net Purchases		$16,950.00		
Add Freight In		415.00	17,365.00	

Although this procedure seems to be correct theoretically, discounts on purchases and discounts on sales usually are shown in the

profit and loss statement under the captions of Other Income and Other Expense, respectively This procedure is illustrated in the statement on page 70

Miscellaneous income Merchandising companies sometimes earn income from transactions other than sales of merchandise Such earnings may be shown in the operating statement under the caption of Other Income, after the net profit from merchandise operations

Extended illustration Several new accounts have been introduced in this chapter We shall now consider them in relation to the working papers, the statements, and the closing of the books

Working papers The assumed facts on which the illustration is based are shown in the working papers on page 69

The company owns trucks which it uses to deliver its merchandise to customers In addition, it makes deliveries for another store the income for this service is credited to Delivery Income account

Illustrative statements The following points should be noted in connection with the illustrative statements of profit and loss on pages 70 and 71

Freight in is added to the net purchases, to determine the total cost of merchandise purchased

The selling expenses are deducted from the gross profit on sales, and the remainder is called *net profit on sales* Freight out is classified as a selling expense

The general expenses are deducted from the net profit on sales and the remainder is called *net profit on operations*

Other income items are added to the net profit on operations, and the total is called *net profit on operations and other income*

Other expenses are then deducted, and the remainder is called *net income*

Exhibit letters It will be noted that the balance sheet is called *Exhibit A*, the surplus statement is called *Exhibit B*, and the profit and loss statement is called *Exhibit C*

The balance sheet shows the surplus at the end of the year, and refers to Exhibit B, where further details regarding the surplus can be found

The surplus statement shows the surplus at the beginning of the year, the net income and the dividends for the year, and the surplus at the end of the year The net income shown in this statement carries a reference to Exhibit C, where details of income and expense can be found

THE POTTER COMPANY
Working Papers
For the Year Ended December 31, 1948

	Trial Balance		Profit and Loss Statement		Surplus Statement		Balance Sheet	
Cash	18,325.00						18,325.00	
B. E. Houston	13,000.00						13,000.00	
R. O. Pemberton	12,500.00						12,500.00	
Inventory (December 31, 1947)	25,000.00		25,000.00					
Delivery Equipment	3,000.00						3,000.00	
The Bellows Company		2,500.00						2,500.00
Hatfield and Snyder		4,875.00						4,875.00
Capital Stock		35,000.00						35,000.00
Surplus (December 31, 1947)		25,950.00				25,950.00		
Sales		103,500.00		103,500.00				
Returned Sales and Allowances	1,500.00		1,500.00					
Purchases	65,000.00		65,000.00					
Returned Purchases and Allowances		1,000.00		1,000.00				
Freight In	2,000.00		2,000.00					
Store Rent	6,000.00		6,000.00					
Advertising	3,000.00		3,000.00					
Salesmen's Salaries	8,000.00		8,000.00					
Freight Out	4,000.00		4,000.00					
Miscellaneous Selling Expenses	600.00		600.00					
Insurance	300.00		300.00					
Taxes	100.00		100.00					
Office Salaries	3,000.00		3,000.00					
Office Expenses	3,625.00		3,625.00					
Delivery Income		1,200.00		1,200.00				
Discount on Purchases		900.00		900.00				
Discount on Sales	975.00		975.00					
Dividends	5,000.00				5,000.00			
	174,925.00	174,925.00						
Inventory, December 31, 1948				20,000.00			20,000.00	
Net Income—To Surplus			9,500.00			9,500.00		
			132,600.00	132,600.00				
Surplus, December 31, 1948					30,150.00			30,150.00
					35,150.00	35,150.00	72,825.00	72,825.00

Exhibit C

THE POTTER COMPANY
Statement of Profit and Loss
For the Year Ended December 31, 1948

Gross Sales			$103 500 00
Deduct Returned Sales and Allowances			1 500 00
Net Sales			$102 000 00
Deduct Cost of Goods Sold			
Inventory December 31 1947		$25 000 00	
Purchases	$65 000 00		
Deduct Returned Purchases and Allowances	1 000 00		
Net Purchases	*$64,000 00*		
Add Freight In	*2 000 00*		
Total		66 000 00	
Total Opening Inventory and Purchases		$91 000 00	
Deduct Inventory December 31 1948		26 000 00	
Cost of Goods Sold			65 000 00
Gross Profit on Sales			$ 37 000 00
Deduct Selling Expenses			
Store Rent		$ 6 000 00	
Advertising		3 000 00	
Salesmen s Salaries		8 000 00	
Freight Out		4 000 00	
Miscellaneous Selling Expenses		600 00	
Total Selling Expenses			21 600 00
Net Profit on Sales			$ 15 400 00
Deduct General Expenses			
Insurance		$ 300 00	
Taxes		100 00	
Office Salaries		3 000 00	
Office Expenses		3 625 00	
Total General Expenses			7 025 00
Net Profit on Operations			$ 8 375 00
Add Other Income			
Delivery Income		$ 1 200 00	
Discount on Purchases		900 00	
Total Other Income			2 100 00
Net Profit on Operations and Other Income			$ 10 475 00
Deduct Other Expenses			
Discount on Sales			975 00
Net Income			$ 9 500 00

Some accountants prefer to omit the words *Add* and *Deduct* and such lines as "Cost of Goods Sold" and "Total Selling Expenses." A statement illustrating these omissions is shown below.

Exhibit C

THE POTTER COMPANY
Statement of Profit and Loss
For the Year Ended December 31, 1948

Gross Sales			$103,500.00
Returned Sales and Allowances			1,500.00
Net Sales			$102,000.00
Cost of Goods Sold:			
Inventory, December 31, 1947		$25,000.00	
Purchases	$65,000.00		
Returned Purchases and Allowances	1,000.00		
Net Purchases	$64,000.00		
Freight In	2,000.00	66,000.00	
Total Opening Inventory and Purchases		$91,000.00	
Inventory, December 31, 1948		26,000.00	65,000.00
Gross Profit on Sales			$ 37,000.00
Selling Expenses:			
Store Rent		$ 6,000.00	
Advertising		3,000.00	
Salesmen's Salaries		8,000.00	
Freight Out		4,000.00	
Miscellaneous Selling Expenses		600.00	21,600.00
Net Profit on Sales			$ 15,400.00
General Expenses:			
Insurance		$ 300.00	
Taxes		100.00	
Office Salaries		3,000.00	
Office Expenses		3,625.00	7,025.00
Net Profit on Operations			$ 8,375.00
Other Income:			
Delivery Income		$ 1,200.00	
Discount on Purchases		900.00	2,100.00
Net Profit on Operations and Other Income			$ 10,475.00
Deduct Discount on Sales			975.00
Net Income			$ 9,500.00

THE POTTER COMPANY — Exhibit B

Statement of Surplus

For the Year Ended December 31, 1948

Surplus, December 31, 1947	$25,950 00
Add Net Income, per Exhibit C	9,500 00
Total	$35,450 00
Deduct Dividends	5,000 00
Surplus, December 31, 1948	$30,450 00

THE POTTER COMPANY — Exhibit A

Balance Sheet

December 31, 1948

Assets		Liabilities and Net Worth		
Cash	$18,325 00	Liabilities		
Accounts Receivable	27,500 00	Accounts Payable		$ 7,375 00
Inventory	26,000 00			
Delivery Equipment	3,000 00			
		Net Worth		
		Capital Stock	$35,000 00	
		Surplus, per Exhibit B	30,450 00	65,450 00
	$72,825 00			$72,825 00

Closing entries. Following are the entries to close the books:

Sales	103,500 00	
Profit and Loss		103,500.00
To close the Sales account.		
Profit and Loss	1,500 00	
Returned Sales and Allowances		1,500 00
To close the Returned Sales and Allowances account.		
Profit and Loss	25,000 00	
Inventory		25,000 00
To charge Profit and Loss with the inventory at the beginning of the year.		
Profit and Loss	67,000 00	
Purchases		65,000 00
Freight In		2,000 00
To close the two last-named accounts.		
Returned Purchases and Allowances	1,000 00	
Profit and Loss		1,000 00
To close the Returned Purchases and Allowances account		
Inventory	26,000 00	
Profit and Loss		26,000 00
To put the December 31, 1948 inventory on the books, with an offsetting credit to *Profit and Loss*		

Profit and Loss	21,600 00	
Store Rent .		6,000 00
Advertising . . .		3,000 00
Salesmen's Salaries		8,000 00
Freight Out .		4,000 00
Miscellaneous Selling Expenses .		600 00
To close the selling expense accounts.		
Profit and Loss .	7,025 00	
Insurance		300 00
Taxes		100 00
Office Salaries		3,000 00
Office Expenses		3,625 00
To close the general expense accounts.		
		5549
Delivery Income	1,200 00	
Discount on Purchases	900 00	
Profit and Loss		2,100 00
To close the other income accounts		
Profit and Loss	975 00	
Discount on Sales		975 00
To close the latter account.		
Profit and Loss	9,500 00	
Surplus		9,500 00
To transfer the net income to Surplus.		
Surplus	5,000 00	
Dividends		5,000 00
To close the latter account.		

Profit and Loss account. The Profit and Loss account produced by posting the closing entries is shown below.

Profit and Loss

1948					1948				
Dec.	31	Rtd. S. & A.	4	1,500 00	Dec	31	Sales	4	103,500 00
	31	Inv. 12/31/47	4	25,000 00		31	Rtd. P. & A.	4	1,000 00
	31	Purchases	4	65,000 00		31	Inv. 12/31/48	4	26,000 00
	31	Freight In	4	2,000 00		31	Delivery Income	4	1,200 00
	31	Store Rent	4	6,000 00		31	Disc on Purchases	4	900 00
	31	Advertising	4	3,000 00					
	31	Sales Salaries	4	8,000 00					
	31	Freight Out	4	4,000 00					
	31	Misc. Sell. Exp.	4	600 00					
	31	Insurance	4	300 00					
	31	Taxes	4	100 00					
	31	Office Salaries	4	3,000 00					
	31	Office Expenses	4	3,625 00					
	31	Disc. on Sales	4	975 00					
	31	To Surplus	4	9,500 00					
				132,600 00					132,600 00

Observe the method of posting compound journal entries. The entry closing the selling expense accounts is an illustration: it is a

short method of accomplishing the result which could have been accomplished by making five journal entries—one for each selling expense account In posting this entry, the bookkeeper debited the Profit and Loss account with the five items with which it would have been debited if five separate closing journal entries had been made

Surplus account. After the Profit and Loss account and the Dividends account are closed, the Surplus account contains the following entries

Surplus

1948					1947					
Dec.	31	Dividends	4	5 000 00	Dec.	31	Balance			25 950 00
					1948					
					Dec.	31	Net Income		4	9 500 00

Alternative closing procedures Some bookkeepers when posting compound closing entries do not debit and credit Profit and Loss with the balances of the several accounts being closed, as in the illustration on page 73 but post to Profit and Loss only the totals shown by the journal entries When postings are made in this manner, the Profit and Loss account appears as follows

Profit and Loss

1948				1948				
Dec.	31	Rtd. S & A.	1 500 00	Dec	31	Sales		103 500 00
	31	Inv 12/31/47	25 000 00		31	Rtd. P & A.		1 000 00
	31	Purchases	65 000 00		31	Inv 12/31/48		26 000 00
	31	Freight In	2 000 00		31	Other income		2 100 00
	31	Selling expenses	21 600 00					
	31	General expenses	7 025 00					
	31	Other expense	975 00					
	31	To Surplus	9 500 00					
			132 600 00					132 600 00

Some accountants further simplify the closing procedure by combining all credits to Profit and Loss in one entry and all debits to Profit and Loss in another entry, as follows

Dec. 31	Sales	103 500 00	
	Returned Purchases and Allowances	1 000 00	
	Inventory (December 31 1948)	26 000 00	
	Delivery Income	1,200 00	
	Discount on Purchases	900 00	
	Profit and Loss		132 600 00
	To set up the inventory at the end of the year and close all operating accounts with credit balances.		

31 Profit and Loss	123,100.00	
Returned Sales and Allowances		1,500.00
Inventory (December 31, 1947)		25,000.00
Purchases		65,000.00
Freight In		2,000.00
Store Rent		6,000.00
Advertising		3,000.00
Salesmen's Salaries		8,000.00
Freight Out		4,000.00
Miscellaneous Selling Expenses		600.00
Insurance		300.00
Taxes		100.00
Office Salaries		3,000.00
Office Expenses		3,625.00
Discount on Sales		975.00
To close all operating accounts with debit balances.		
31 Profit and Loss	9,500.00	
Surplus		9,500.00
To transfer the net income to Surplus.		

Profit and Loss

1948				1948				
Dec.	31		123,100 00	Dec.	31			132,600 00
	31	To Surplus	9,500 00					
			132,600 00					132,600 00

Some accountants simplify the closing procedure to the point of making a single journal entry which closes all the operating accounts, sets up the inventory at the end of the period, and credits the net income to Surplus without the use of a Profit and Loss account. Such a closing entry is shown below:

Dec. 31 Sales	103,500.00	
Returned Purchases and Allowances	1,000.00	
Inventory (December 31, 1948)	26,000.00	
Delivery Income	1,200.00	
Discount on Purchases	900.00	
Returned Sales and Allowances		1,500.00
Inventory (December 31, 1947)		25,000.00
Purchases		65,000.00
Freight In		2,000.00
Store Rent		6,000.00
Advertising		3,000.00
Salesmen's Salaries		8,000.00
Freight Out		4,000.00
Miscellaneous Selling Expenses		600.00
Insurance		300.00
Taxes		100.00
Office Salaries		3,000.00
Office Expenses		3,625.00
Discount on Sales		975.00
Surplus		9,500.00
To close the books.		

The procedure adopted by each accountant is largely a matter of personal preference.

Ruling and lettering personal accounts. As a means of indicating the *open*, or *unsettled*, items in accounts with debtors and creditors, many bookkeepers rule off the accounts by single rulings to show that the entries above the rulings balance each other. Such rulings are illustrated below

C. D Edmunds

19—					19—				
May	3		1	500 00	May	12		1	500 00
June	9		1	1,200 00	June	11		1	50 00
						18		3	1 150 00

In many cases the dates of the transactions are such that the rulings indicating payments of certain invoices cannot be made on *the same line on both sides of the account.* Such a condition is illustrated in the following account

Fred Bushnell

19—					19—				
Aug	6		1 a	900 00	Aug	8		1 a	40 00
	10		2 b	1 000 00		15		1 a	860 00
	12		3	400 00		17		2 b	50 00
						19		2 b	1 550 00

In such instances it is desirable to indicate offsetting items by letters, as illustrated in the foregoing account The lettering system is also advantageous when an account cannot be ruled because an early invoice remains unsettled although a later invoice has been settled in full. This condition is illustrated below

Mark Weil

19—					19—				
Oct	15		1 a	1 500 00	Oct	19		1 a	50 00
Nov	12		2 b ✓	1 000 00	Nov	15		2 b ✓	100 00
						21		2 b ✓	900 00

This account shows the following facts.

(a) The credit of $50 00 applies against the $1,500 00 debit of October 15. The balance of this invoice is still unsettled.
(b) The November 12 debit was settled by two credits· one for $100 00 and another for $900 00

(It will be observed that Weil has settled for the November 12th invoice before settling for the earlier invoice A debtor has the

right to designate the invoice against which a remittance shall be applied.)

The reference letters *b* have been checked because the *b* entries balance each other. The reference letters *a* have not been checked because the *a* entries do not balance each other. The letters thus indicate which debits and credits apply against each other, and the check marks indicate which invoices have been settled in full.

CHAPTER 7

Promissory Notes

Promissory notes. The following definition is quoted from the Uniform Negotiable Instruments Act

> A negotiable promissory note within the meaning of this act is an unconditional promise in writing made by one person to another, signed by the maker, engaging to pay on demand or at a fixed or determinable future time a sum certain in money to order or bearer

$100 00 Chicago, Illinois, July 25, 19--

One month after date I promise to pay to

the order of F K Hamilton

--One Hundred-no/100------------------------ Dollars

Payable at First National Bank of Chicago

Value received, with interest at 6%

No 17 Due August 25, 19-- C H Mather

The original parties to a note are:

The payee—In the above illustration,
F. K. Hamilton.
The maker—In the above illustration,
C. H. Mather.

Every promissory note is a note receivable from the standpoint of the payee (since he expects to receive money) and a note payable from the standpoint of the maker (since he expects to pay money).

Maturity. Notes may be drawn to mature.

(1) On a date named in the note, thus: "On June 30, 19—, I promise to pay."
(2) On demand, thus: "On demand, I promise to pay."
(3) Upon the expiration of a stated period of time; the time may be stated in several ways, as indicated on the following page:

(a) Years, thus: "One year after date, I promise to pay." Such notes will mature in a subsequent year on the same day of the same month as the date of issue, except that notes issued on February 29, payable in a year having only 28 days in February, will mature on February 28.

(b) Months, thus: "Three months after date, I promise to pay." Such notes will mature in a subsequent month on the same day of the month as the date of issue, except that: (1) notes dated on the 31st of a month and maturing in a month having only 30 days will mature on the 30th of the month; and (2) notes dated on the 29th, 30th, or 31st of a month and maturing in February will mature on the last day of February.

(c) Days, thus: "One hundred and twenty days after date, I promise to pay." The maturity of such notes may be determined by the method used in the following illustrative computation of the maturity of a note dated December 15, 1948, maturing in 120 days:

Remaining days in December	16	
Days in January	31	
	47	
Days in February	28	
	75	
Days in March	31	
	106	
Days in April	14	Maturity
	120	

Interest

Computing interest. There are several methods of computing simple interest. Some of the shortest are explained below. At 6% per annum,

The interest on $1.00 for 1 year is	$.06	
The interest on 1.00 for 2 months (60 days) is	.01	(1/6 of $.06)
The interest on 1.00 for 6 days is	.001	(1/10 of $.01)

It is evident that interest on $1.00 for sixty days can be computed by moving the decimal point in the principal two places to the left, and that interest on $1.00 for six days can be computed by moving the decimal point in the principal three places to the left. If this is true of $1.00, it is true of any principal, and a general rule may be developed in the manner shown on page 80.

Given any principal, to find the interest at 6%

For	6 days,	point off three places to the left
"	60 " ,	" " two " " " "
"	600 " ,	" " one place " " "
"	6,000 " ,	the interest is the same as the principal.

Thus,	6 days' interest on	$1,230 00 is	$ 1 23
	60 " " "	1,230 00 "	12 30
	600 " " "	1,230 00 "	123 00
	6,000 " " "	1,230 00 "	1,230 00

Multiples and fractions. The time, stated in days, may be separated into parts that are multiples or fractions of 6, 60, 600, or 6,000, and the interest for partial time periods may be added.

First illustration. What is the interest on $137.65 for fifteen days?

Interest for 60 days = $1 3765
" " 15 " = ¼ of $1 3765, or $ 3441

Second illustration. What is the interest on $137.65 for eighty-eight days?

Interest for 60 days	=	$1 3765
" " 20 "	=	4588 (⅓ of $1 3765)
" " 6 "	=	13765
" " 2 "	=	04588 (⅓ of $ 13765)
88	=	$2 01883 or $2 02

Interest for any number of days. When the time cannot easily be divided into fractions or multiples of 6, 60, 600, or 6,000,

Point off three places (Amount is interest for six days)
Multiply by the number of days (Product is interest for six times the stated number of days)
Divide by 6 (Quotient is interest for the stated number of days)

Illustration. What is the interest on $137 65 at 6% for seventy-seven days?

Point off three places	$ .13765
Multiply by	77
Interest for 6 × 77 days	$10 59905

Divide by 6 $10 59905 − 6 = $1 7665 = $1 77, interest for 77 days

Interchanging principal and time. The principal and time may be interchanged, if this procedure will simplify the computation.

Illustration. What is the interest on $1,000.00 for thirty-eight days?

Interchanging, what is the interest on $38 00 for 1,000 days?
Interest for 6,000 days = $38 00
Divide by 6 $38 00 − 6 = 6 33

Interest at other rates. When the rate is other than 6%, it is usually desirable to compute the interest at 6%, and make the adjustments for the difference between 6% and the actual rate.

First illustration. What is the interest on $360.00 for thirty days at 7%?

Compute the interest at 6%:	
Interest for 60 days =	$3.60
Interest for 30 days =	$1.80
Add one sixth of $1.80	.30
Interest at 7%	$2.10

Second illustration. What is the interest on $3,500.00 for forty-five days at 5½%?

Compute the interest at 6%:	
Interest for 60 days =	$35.00
Interest for 45 days = ¾ of $35.00	$26.25
Deduct (for ½ of 1%) 1/12 of $26.25	2.19
Interest at 5½%	$24.06

Computing the time. In the determination of the number of days between two dates, for purposes of computing interest, exclude the first day and include the last. For instance, if you were asked to compute the interest on a note dated June 17 and due August 4, you would compute the time as follows:

Remaining days in June...	13
July..	31
August...	4
	48

Notes Receivable

Notes Receivable account. Although it is customary to keep a separate account with each debtor who owes the business on open account, notes receivable from all debtors may be recorded in one account, thus:

Notes Receivable

19—					19—				
July	3	J. B. Gates 60 da.	1 a	1,000 00	Aug.	1	J. F. Cole	1 d	1,000 00
	7	C. L. Peters 30 da.	1 b	1,500 00					
	18	H. N. Burt 30 da.	1 c	1,000 00					
	22	J. F. Cole 10 da.	1 d	1,000 00					

Each debit entry shows the name of the maker and the time the note is to run. The credits are identified with the debits by names and cross-reference letters; thus, the credit records the collection of the Cole note, as evidenced by the reference *d*.

The number of days shown in each entry is the number of days the note runs Since the note may bear a date earlier than that of the entry, the maturity of the note is not necessarily the stated number of days after the date of the entry

Entries for note receivable transactions Let us assume that we receive from Peter Dunlap a note for $1,000 00 due in 60 days Illustrative entries for the receipt of the note and for its collection or dishonor at maturity are shown below

(*A*) *Entries for the receipt of the note*

In studying the following illustrative entries, you will observe that the entry to be made when a note receivable is received always includes a debit to the Notes Receivable account the credit depends upon other facts about the transaction

You will observe also that the following illustrative debit and credit entries for the receipt of a note are not affected by the fact that the note bears interest or does not bear interest The only difference is in the explanation, which states whether the note is interest bearing or non interest-bearing

(1) Assume that the note is received for a cash loan to Dunlap (and that it bears 6% interest)

Notes Receivable	1 000 00	
Cash		1 000 00
Received a 60-day 6% note from Peter Dunlap for a loan		

(2) Assume that Dunlap is indebted to us on an account receivable, and that we obtain the note from him to apply on account (and that it does not bear interest)

Notes Receivable	1 000 00	
Peter Dunlap		1 000 00
Received a 60-day note without interest to apply on account		

(3) Assume that we sell merchandise to Dunlap and receive a note immediately for the amount of the invoice (and that the note bears 6% interest)

The transaction *might be* recorded as follows

Notes Receivable	1 000 00	
Sales		1 000 00
Received a 60-day 6% note from Peter Dunlap for amount of sale today		

However, it is considered better practice to make two entries, as illustrated below, so that all the facts will be shown in our account with Dunlap:

Peter Dunlap	1,000.00	
Sales		1,000.00
Sale of merchandise.		
Notes Receivable	1,000.00	
Peter Dunlap		1,000.00
Received a 60-day, 6% note for amount of sale today.		

(*B*) *Entries for the collection of the note:*

The entries for the collection of a note *are* affected by the fact that it bears interest or does not bear interest.

(1) Assume that the note mentioned in the preceding illustrations does not bear interest; we will collect the face of the note, $1,000.00.

Cash	1,000.00	
Notes Receivable		1,000.00
Collection of 60-day note from Peter Dunlap.		

(2) Assume that the note bears 6% interest; we will collect the face of the note and $10.00 interest.

Interest is a fee charged for loaning money or extending credit; it is income to the payee of the note, and should be credited by him to Interest Income account.

Cash	1,010.00	
Notes Receivable		1,000.00
Interest Income		10.00
Collection of 60-day note and interest at 6%, from Peter Dunlap.		

(*C*) *Entries if note is dishonored:*

If the maker of a note does not settle for it at maturity, the note is said to be dishonored. Some bookkeepers make no entry whatever to show that a note receivable has been dishonored, and continue to carry it in the Notes Receivable account, with the hope that eventually it will be collected.

This is not the best practice. If we hold a note receivable and do not collect it at maturity, we should transfer the amount from the Notes Receivable account to an account receivable with the debtor, so that our account with the debtor will show, for credit information purposes, the fact that he has dishonored his note.

Illustrative entries to record the dishonoring of notes are shown below:

(1) Assume that Dunlap's note does not bear interest, and that he dishonors it

Peter Dunlap	1,000 00	
Notes Receivable		1,000 00
Non-interest-bearing note dishonored.		

(2) Assume that Dunlap's note bears 6% interest, and that he dishonors it

Peter Dunlap	1 010 00	
Notes Receivable		1,000 00
Interest Income		10 00
Dishonor of 6% note		

Observe that the Interest Income account is credited, even though the interest is not collected The interest has been earned, and Dunlap owes us the interest as well as the face of the note.

(D) *Entries if note is partially collected*

If, at the maturity of a note we make only a partial collection, we should charge the maker s account with only the uncollected portion of the amount due, because the note is only partially dishonored.

(1) Assume that Dunlap's note does not bear interest, and that we collect $700 00 at maturity

Cash	700 00	
Notes Receivable		700 00
Partial collection on $1,000 00 note from Peter Dunlap		
Peter Dunlap	300 00	
Notes Receivable		300 00
To charge Dunlap's account with uncollected portion of note due today		

(2) Assume that Dunlap's note bears interest, and that we collect the interest and $700 00 of the principal·

Cash	710 00	
Notes Receivable		700 00
Interest Income		10 00
Collection of portion of principal of $1,000 00 note, and the interest.		
Peter Dunlap	300 00	
Notes Receivable		300 00
To charge Dunlap's account with uncollected portion of note due today		

(*E*) *Entries for a renewal note:*

At the maturity of a note, the maker may dishonor it and give us a new note for the full amount; or we may receive a partial collection in cash and a new note for the balance.

(1) Assume that Dunlap's note does not bear interest, and that, at maturity, he dishonors it and gives us a new note for the amount of the dishonored note. Our entries are:

Peter Dunlap	1,000.00	
Notes Receivable		1,000.00
Dishonor of 60-day note due today.		
Notes Receivable	1,000.00	
Peter Dunlap		1,000.00
New 60-day note received.		

(2) Assume that Dunlap's note bears interest, and that, at maturity, we collect the interest and $700.00 on the principal, and that we receive from Dunlap a new 60-day, 6% note for the balance. Our entries are:

Cash....	710.00	
Notes Receivable		700.00
Interest Income		10.00
Collection of portion of $1,000.00 note, and the interest.		
Peter Dunlap	300.00	
Notes Receivable		300.00
Dishonor of portion of 60-day note due today		
Notes Receivable	300.00	
Peter Dunlap		300.00
New 60-day, 6% note for balance of note due today.		

Notes Payable

Notes Payable account. Notes payable are also recorded in one account. Each credit entry shows the name of the payee and the time the note is to run. The debits recording payments are identified with the credits by writing the names of the payees and by using cross-reference letters, in the manner illustrated in the Notes Receivable account on page 81.

Entries for note payable transactions. Let us assume that we give George Weaver a note for $2,500.00, due in 60 days. Illustrative entries for the issuance and for the payment or dishonor of this note are shown on the following page.

(*A*) *Entries for the issuance of the note*

The debit and credit entries for the issuance of an interest-bearing note and the issuance of a non interest-bearing note are the same The entry to record the issuance of a note always includes a credit to the Notes Payable account the debit depends on other facts about the transaction, as illustrated below

(1) Assume that the note is issued to Weaver for a cash loan (and that it bears 6% interest)

Cash	2 500 00	
Notes Payable		2 500 00
Issued 60-day 6% note to George Weaver for a loan		

(2) Assume that we are indebted to Weaver on an account payable and that we give him the note to apply on account (and that the note does not bear interest)

George Weaver	2 500 00	
Notes Payable		2 500 00
Issued a 60-day note without interest on account		

(3) Assume that we purchase merchandise from Weaver and issue a note immediately for the amount of the invoice (and that the note bears 6% interest)
The transaction *might be* recorded as follows

Purchases	2 500 00	
Notes Payable		2 500 00
Issued a 60-day 6% note to George Weaver for amount of purchase today		

However it is considered better practice to make two entries as illustrated below so that all the facts will be shown in our account with Weaver

Purchases	2 500 00	
George Weaver		2 500 00
Purchase of merchandise		
George Weaver	2 500 00	
Notes Payable		2 500 00
Issue a 60-day 6% note for purchase today		

(*B*) *Entries for the payment of the note*

(1) Assume that the note does not bear interest we will pay the face of the note, $2 500 00

Notes Payable	2 500 00	
Cash		2 500 00
Payment of 60-day note to George Weaver		

(2) Assume that the note bears 6% interest; we will pay the face of the note and $25.00 interest.

Notes Payable	2,500.00	
Interest Expense . .	25.00	
Cash		2,525.00
Payment of 60-day note and 6% interest to George Weaver.		

(C) *Dishonor of a note payable:*

If we hold a note receivable and it is dishonored at maturity, we should charge it back to the maker's account, so that his account will show, for credit information purposes, that he has dishonored his note.

If we dishonor our note payable, we have no similar reason for transferring the amount of the note from the Notes Payable account to an account payable with the payee. Therefore, we will make no entry to show that we have dishonored the note.

If the note bears interest and we do not pay it, we should make an entry to record the interest expense and the liability for the interest. Thus, if our note to Weaver bears interest and we make no payment at maturity, we should make the following entry:

Interest Expense	25.00	
Accrued Interest Payable		25.00
Interest accrued at 6% for 60 days on note payable to George Weaver, due today.		

(D) *Entries if note is partially paid:*

If, at the maturity of our note payable, we pay a portion thereof, our only entry will be for the amount of the payment.

(1) Assume that the note to Weaver does not bear interest, and that we make a partial payment of $1,200.00 at maturity:

Notes Payable	1,200.00	
Cash		1,200.00
Partial payment to George Weaver on note due today.		

(2) Assume that the note to Weaver bears 6% interest, and that we make a partial payment of $1,200.00 at maturity. Since Weaver will presumably regard $25.00 as payment of interest, and will regard the re-

mainder as a payment on the principal, our entry will be

Interest Expense	25 00	
Notes Payable	1 175 00	
Cash		1,200 00
Payment of portion of principal of note to George Weaver, due today, and interest		

(*E*) *Entries for a renewal note*

At the maturity of our note payable, we may give a new note for the full amount, or we may make a partial payment and give a new note for the balance

(1) Assume that the Weaver note does not bear interest, and that, at maturity, we give him a new note due in 60 days for the amount of the old note Our entry will be

Notes Payable	2 500 00	
Notes Payable		2 500 00
Issuance of a new 60 day note to George Weaver for face of 60-day note due today		

(2) Assume that the Weaver note bears 6% interest, and that, at maturity, we pay him the interest on the note and \$1 000 00 on the principal, and give him a new 60-day, 6% note for the balance

Notes Payable	1 000 00	
Interest Expense	25 00	
Cash		1 025 00
Payment of portion of note due today and total interest		
Notes Payable	1 500 00	
Notes Payable		1 500 00
Issuance of a new 60-day 6% note to George Weaver for unpaid portion of note due today		

Discounting a note payable. When a note payable is issued to a bank for a loan, the note usually does not bear interest, but the interest is deducted in advance For instance, assume that we give a bank a 60 day note for \$1,000 00, and that the bank charges discount at 6% The discount is \$10 00, and we will receive the proceeds of \$990 00

Entry at time of discounting note

Cash	990 00	
Interest Expense	10 00	
Notes Payable		1 000 00
Note due in 60 days discounted at bank		

Entry for payment of note:

Notes Payable	1,000.00	
Cash		1,000.00
Payment of note to bank.		

Interest in the profit and loss statement. Interest income and interest expense are shown at the bottom of the profit and loss statement, thus:

Net Profit from Operations		$13,215.67
Add Other Income:		
Discount on Purchases	$923.36	
Interest Income	72.54	
Total Other Income		995.90
Net Profit on Operations and Other Income		$14,211.57
Deduct Other Expenses:		
Discount on Sales	$672.94	
Interest Expense	219.53	
Total Other Expenses		892.47
Net Income		$13,319.10

CHAPTER 8

Books of Original Entry

Saving and division of labor The journal is called a *book of original entry* because transactions are recorded in it before they are recorded in the ledger The ledger is called a *book of final entry*

Accountants have given a great deal of thought to the development of accounting records which reduce the labor of recording transactions, and which permit a division of labor in large businesses where one bookkeeper cannot do all the work In this and the two following chapters, some of these labor saving and labor dividing records will be described In this chapter we shall describe columnar journals and specialized books of original entry

Columnar Journals

Special columns to reduce postings One of the simplest labor-saving devices is a journal in which special columns are provided for accounts frequently debited and credited Such a journal is illustrated on page 91 Observe that posting labor is saved because the individual entries in the special columns are not posted, only the totals of these columns are posted, as indicated by the ledger page numbers at the bottom of the columns The only items individually posted are those for which special columns are not provided

Observe, also, the use of check marks Check marks appear in the L F. column beside the names of accounts for which special columns are provided, these check marks indicate that the individual entries are not posted Check marks also appear at the bottom of the Sundry columns to indicate that the totals of these columns are not posted because the individual entries have been posted

Eliminating writing of account names. The journal on page 92 illustrates another labor saving device If a special column is provided for an account, the name of that account need not be written in the journal entry For instance, the first entry records a debit to Cash and a credit to Capital Stock, but since the debit to Cash is indicated by writing the amount in the Cash debit column, it is not necessary also to write "Cash" in the "Accounts Debited" section Look at each journal entry on page 92 and determine the accounts debited and credited

Journal

ate	L.F.		Debits			Credits		
			Cash	Purchases	Sundry	Cash	Sales	Sundry
1	√	Cash	10,000 00					
	10	Capital Stock						10,000 00
		Issuance of stock.						
5	√	Purchases		3,000 00				
	31	Wilson & Co.						3,000 00
		Purchase on account.						
9	√	Purchases		1,000 00				
	√	Cash				1,000 00		
		Cash purchase.						
13	21	John Pierce			500 00			
	√	Sales					500 00	
		Sale on account.						
18	√	Cash	300 00					
	√	Sales					300 00	
		Cash sale.						
22	31	Wilson & Co.			3,000 00			
	√	Cash				3,000 00		
		Payment of account.						
26	√	Cash	500 00					
	21	John Pierce						500 00
		Collection of account.						
30	17	Expense			50 00			
	√	Cash				50 00		
		Payment of expense.						
			10,800 00	4,000 00	3,550 00	4,050 00	800 00	13,500 00
			(1)	(11)	(√)	(1)	(14)	(√)

Specialized Books of Original Entry

Division of labor. The columnar journal on page 92 saves labor in two ways; some account names need not be written, and column totals can be posted. But it does not provide for a division of labor. The specialized books of original entry described in the remainder of this chapter provide the labor-saving advantages of the columnar journal on page 92, and also provide for a division of labor. Since several books of original entry are used, several bookkeepers can be employed.

Books to be illustrated. The special books to be used in any business will depend upon the nature of its operations, and upon

Journal

Date		Accounts Debited		Accounts Credited		Explanation	Debits			Credits		
		L.F.	Name	L.F.	Name		Cash	Purchases	Sundry	Cash	Sales	Sundry
19— June	1			10	Capital Stock	Issuance of stock	10,000.00					10,000.00
	5			31	Wilson & Co	Purchase on account		3,000.00				3,000.00
	9					Cash purchase		1,000.00		1,000.00		
	17	21	John Pierre			Sale on account			500.00		500.00	
	18					Cash sale	300.00				300.00	
	22	31	Wilson & Co			Payment of account			3,000.00	3,000.00		
	26			21	John Pierre	Collection of account	500.00					500.00
	30	17	Expense			Payment of expense			50.00	50.00		
							10,800.00	4,000.00	3,550.00	4,050.00	800.00	13,500.00
							(1)	(11)	(√)	(1)	(14)	(√)

whether transactions of a particular kind occur often enough to warrant having a special book of original entry in which to record them. The books to be illustrated in this chapter are:

Sales book.
Returned sales and allowances book.
Purchase book.
Returned purchases and allowances book.
Cash receipts book.
Cash disbursements book.

These books are sometimes called the *sales journal*, the *returned sales and allowances journal*, and so forth. Since some transactions cannot be recorded in the special books of original entry, it is necessary also to have a journal such as the one illustrated in previous chapters in which to record these transactions; this book may be called the *general journal* or merely the *journal*.

If a transaction is recorded in one of the specialized books of original entry, it is not recorded also in the general journal: only those transactions which cannot be recorded in a specialized book of original entry are recorded in the general journal.

Sales book. A sales book is illustrated below.

Sales Book (Page 1)

Date		L.F.	Name of Customer	Invoice No.	Amount
19—					
June	1	3	J. R. Walton	1	1,200 00
	3	4	F. B. White	2	600 00
	4	3	J. R. Walton	3	500 00
	5	4	F. B. White	4	400 00
	10	5	C. E. Magee	5	480 00
	15	3	J. R. Walton	6	300 00
	20	6	D. E. Bailey	7	300 00
	25	5	C. E. Magee	8	400 00
	30	6	D. E. Bailey	9	200 00
	30	31	Sales—credit		4,470 00

The entries in this sales book contain nine debits to customers' accounts; these debits were posted to the customers' accounts, as indicated by the numbers in the L.F. column. At the end of the month, the entries in the sales book were footed, and the total was posted in one amount to the credit of the Sales account on page 31 of the ledger.

The sales book need not contain any detailed information about the kinds of goods sold. A numbered invoice is given to the customer, and a carbon copy thereof is retained and filed. The sales

book shows the number of this invoice. Information about the kinds of merchandise sold can be obtained by referring to the filed duplicate of the invoice indicated by the number.

The sales book has the following advantages:

Saving of labor:

- In recording transactions—Each entry records a debit to a customer and a credit to Sales; but the credit to Sales need not be written, it is *implied* because the entry is made in the sales book.
- In posting—Instead of posting the amount of each sale separately to the Sales account, the bookkeeper posts the total of all the entries.

Division of labor:

- One bookkeeper can be engaged in recording sales while other bookkeepers are recording other kinds of transactions.

The other special books of original entry discussed in this chapter have the same advantages.

Returned sales and allowances book. The first entry in the following returned sales and allowances book is equivalent to the following journal entry.

June 6—Returned Sales and Allowances	50 00	
F B White		50 00
For credit memo 1		

Returned Sales and Allowances Book (Page 1)

Date		L F	Name	Credit Memo No	Amount
19—					
June	6	4	F B White	1	50 00
	16	3	J R Walton	2	25 00
	30	6	D E Bailey	3	15 00
	30	32	Returned Sales and Allowances—debit		90 00

The numbers in the L F. column indicate that the three credits to customers were posted to their accounts, and that the column total was posted to the debit of the Returned Sales and Allowances account.

Purchase book. Savings in journalizing and posting can be effected by using a special book of original entry for recording purchases on account. The entries in the purchase book on page 95 are equivalent to seven journal entries debiting the Purchases account and crediting the parties from whom the merchandise was purchased.

Purchase Book (Page 1)

Date		L.F.	Name	Date of Creditor's Invoice	Amount
19—					
June	4	11	Brown & Green	June 1	1,500.00
	5	12	Dalton & Company	2	300.00
	8	11	Brown & Green	4	1,600.00
	13	12	Dalton & Company	10	2,000.00
	16	13	E. R. Walker	11	1,850.00
	24	11	Brown & Green	22	1,750.00
	30	14	O. L. Bates	27	750.00
	30	41	Purchases—debit		9,750.00

The credits to the creditors' accounts were posted individually; the total was posted at the end of the month to the debit of the Purchases account, ledger page 41.

Returned purchases and allowances book. The entries in this book record debits to three creditors' accounts for returns of, or allowances for, unsatisfactory merchandise. The total was posted to the credit of Returned Purchases and Allowances.

Returned Purchases and Allowances Book (Page 1)

Date		L.F.	Name	Explanation	Amount
19—					
June	10	11	Brown & Green.	Their cr. memo 75	100.00
	17	13	E. R. Walker	Their cr. memo 139	50.00
	30	14	O. L. Bates	See our letter 6/30	150.00
	30	42	Returned Purchases and Allowances—credit		300.00

Cash receipts book. The following transactions are recorded in the illustrative cash receipts book on page 96:

June 1—Issued capital stock for cash, $15,000.00.
8—Sold merchandise for cash, $2,000.00.
12—Collected $100.00 from J. R. Walton on account.
18—Sold merchandise for cash, $1,200.00.
20—Collected $350.00 from F. B. White on account.
22—Collected note receivable, $1,200.00, and interest, $4.00, from J. R. Walton.
28—Collected $200.00 from C. E. Magee.
30—Sold merchandise for cash, $500.00.

Each of the entries in the cash receipts book records a receipt of cash. The debit to Cash was not written in each entry, but was implied from the fact that the entry was made in the cash receipts record. The total debit to Cash, shown by the footing of the book, was posted in one amount to the Cash account. The credits to the various accounts were posted individually.

Cash Receipts Book (Page 1)

Date		L F	Account Credited	Explanation	Amount	
19—						
June	1	20	Capital Stock	Investment	15 000	00
	8	31	Sales	Cash sale	2 000	00
	12	3	J R Walton	On account	100	00
	18	31	Sales	Cash sale	1 200	00
	20	4	F B White	On account	350	00
	22	7	Notes Receivable	J R. Walton	1 200	00
	22	55	Interest Income	On above note	4	00
	28	5	C E Magee	On account	200	00
	30	31	Sales	Cash sale	500	00
	30	1	Cash—debit		20 554	00

Cash disbursements book The following transactions were recorded in the illustrative cash disbursements book

June 5—Purchased merchandise for cash $10 000 00
12—Paid Brown & Green $1,000 00 on account
15—Paid store rent, $250 00
22—Purchased merchandise for cash $300 00
24—Paid Dalton & Company $2 000 00 in settlement of their invoice of June 10
25—Paid Brown & Green for note payable $1,500 00, and interest, $5 00
30—Paid wages, $150 00
Paid dividends $500 00

Cash Disbursements Book (Page 1)

Date		L F	Account Debited	Explanation	Amount	
19—						
June	5	41	Purchases	Cash purchase	10 000	00
	12	11	Brown & Green	On account	1 000	00
	15	53	Rent	For month	250	00
	22	41	Purchases	Cash purchase	300	00
	24	12	Dalton & Company	Inv June 10	2 000	00
	25	15	Notes Payable	Brown & Green	1 500	00
	25	56	Interest Expense	On above note	5	00
	30	54	Wages	For month	150	00
	30	61	Dividends	To stockholders	500	00
	30	1	Cash—credit		15 705	00

Each of the entries in the cash disbursements book records a cash payment The credits to Cash were not written, we know that Cash is credited because the entries appear in the cash disbursements book The total of the book was posted to the credit of the Cash account in one amount The name of the account debited was written in each entry, and these debits were posted individually

Cash book entries for notes and interest Observe the entries in the preceding cash books recording the collection of a note and interest, and the payment of a note and interest

Collection of note and interest:

On June 22, the company collected a $1,200.00 note and $4.00 interest, from J. R. Walton. If the journal were the only book of original entry used, the transaction would be recorded by the following journal entry:

Cash	1,204.00	
Notes Receivable		1,200.00
Interest Income		4.00

When a cash receipts book is used, two entries are made: One entry records the collection of the face of the note, and the next entry records the collection of the interest.

Cash Receipts Book

Date		L.F.	Account Credited	Explanation	Amount
June	22	7	Notes Receivable	J. R. Walton	1,200.00
	22	55	Interest Income	On above note	4.00

Payment of note and interest:

On June 25, the company paid a $1,500.00 note and $5.00 interest to Brown & Green. If the journal were the only book of original entry, the transaction would be recorded as follows:

Notes Payable	1,500.00	
Interest Expense	5.00	
Cash		1,505.00

When a cash disbursements book is used, two entries are made: One entry records the payment of the face of the note, and the next entry records the payment of the interest.

Cash Disbursements Book

Date		L.F.	Account Debited	Explanation	Amount
June	25	15	Notes Payable	Brown & Green	1,500.00
	25	56	Interest Expense	On above note	5.00

Recording the discounting of a note payable. Assume that, on June 4, the company had discounted a 30-day note for $5,000.00 at the bank, that the discount rate was 6%, and that the proceeds were $4,975.00. If a journal were the only book of original entry in use, the transaction would be recorded as follows:

Cash	4,975.00	
Interest Expense	25.00	
Notes Payable		5,000.00

When cash books in the form illustrated in this chapter are used, two entries are required, they may be made as follows

Cash Receipts Book

Date		L F	Account Credited	Explanation	Amount
June	4	15	Notes Payable	Discounted at bank	5 000 00

Cash Disbursements Book

Date		L F	Account Debited	Explanation	Amount
June	*4*	*56*	*Interest Expense*	*On discounted note*	*25 00*

The entries in the two cash books record debits and credits equivalent to those shown in the journal entry on page 97

The $5,000 00 debit to Cash (in the cash receipts book) minus the credit to Cash in the cash disbursements book, makes a net debit of $4,975 00 to Cash

Interest Expense is debited $25 00 in the cash disbursements book.

Notes Payable is credited $5,000 00 in the cash receipts book.

Although this procedure produces the proper credit to Notes Payable, the proper debit to Interest Expense, and a correct *net* debit of $4,975 00 to Cash, it is subject to the criticism that an entry is made in the cash disbursements book although no disbursement was made For this reason, some accountants prefer to make a red ink entry in the cash receipts book for the amount of the discount, as in the following illustration

Cash Receipts Book

Date		L F	Account Credited	Explanation	Amount
June	4	15	Notes Payable	Discounted at bank	5 000 00
	4	56	*Interest Expense*	*On discounted note*	*25 00*

The red entry (represented by italics) indicates that the Interest Expense account is to be debited and that the $25 00 is to be deducted when computing the total of the money column

The journal. All transactions which cannot be recorded in the special books of original entry are recorded in the journal When special books of original entry are kept for sales, purchases, returns and allowances, and cash, few entries appear in the journal

The following transactions are recorded in the journal on page 99

June 1—Capital stock was issued for merchandise $5 000 00

2—A 20-day, 6% note for $1,200 00 was received from J R. Walton for the invoice of June 1

4—A 30-day, 6% note for $600.00 was received from F. B. White for the invoice of June 3.

5—Gave Brown & Green a 20-day, 6% note for the purchase of June 4, $1,500.00.

8—Issued a 30-day, non-interest note to Dalton & Company, $300.00, for goods purchased June 5.

Journal (Page 1)

19—					
June	1	Inventory	8	5,000.00	
		Capital Stock	20		5,000.00
		Issuance of capital stock for merchandise.			
	2	Notes Receivable	7	1,200.00	
		J. R. Walton	3		1,200.00
		Note due in 20 days, at 6%, for invoice of June 1.			
	4	Notes Receivable	7	600.00	
		F. B. White	4		600.00
		Note due in 30 days, at 6%, for invoice of June 3.			
	5	Brown & Green	11	1,500.00	
		Notes Payable	15		1,500.00
		Note due in 20 days, at 6%, for purchase received June 4.			
	8	Dalton & Company	12	300.00	
		Notes Payable	15		300.00
		Note without interest, due in 30 days, for invoice received June 5.			

References to books of original entry. When several books of original entry are used, the ledger accounts must indicate the books from which the entries were posted. Thus, in the following accounts:

CR1 means cash receipts book, page 1.
CD1 " cash disbursements book, page 1.
S1 " sales book, page 1.
P1 " purchase book, page 1.
RS1 " returned sales and allowances book, page 1.
RP1 " returned purchases and allowances book, page 1.
J1 " journal, page 1.

You should trace all the postings from the foregoing books of original entry to the following ledger accounts, beginning with the first entry in the sales book and continuing to the last entry in the journal.

Cash (Page 1)

19—					19—				
June	30	4,849.00	CR1	20,554.00	June	30		CD1	15,705.00

J. R. Walton (Page 3)

19—					19—				
June	1		S1	1,200 00	June	2		J1	1,200 00
	4		S1	500 00		12		CR1	100 00
	15	675 00	S1	300 00		16		RS1	25 00
				800 00					125 00

F B White (Page 4)

19—					19—				
June	3		S1	600 00	June	4		J1	600 00
	5		S1	400 00		6		RS1	50 00
						20		CR1	350 00

C E Magee (Page 5)

19—					19—				
June	10		S1	480 00	June	28		CR1	200 00
	25	680 00	S1	400 00					
				880 00					

D E Bailey (Page 6)

19—					19—				
June	20		S1	300 00	June	30		RS1	15 00
	30	575 00	S1	290 00					
				590 00					

Notes Receivable (Page 7)

19—					19—				
June	2	J R. Walton 20 da	J1 a	1,200 00	June	22	J R Walton	CR1 a	1,200 00
	4	F B White 30 da	J1 b	600 00					

Inventory (Page 8)

19—									
June	1		J1	5,000 00					

Brown & Green (Page 11)

19—					19—				
June	5		J1	1,500 00	June	4		P1	1,500 00
	10		RP1	100 00		8		P1	1 600 00
	12		CD1	1,000 00		24	2 250 00	P1	1,750 00
				1,100 00					3,350 00

Dalton & Company (Page 12)

19—					19—				
June	8		J1	300 00	June	5		P1	300 00
	24		CD1	2 000 00		13		P1	2 000 00

E R. Walker (Page 13)

19—					19—				
June	17		RP1	50 00	June	16	1 800 00	P1	1,850 00

O. L. Bates (Page 14)

19—					19—				
June	30		RP1	150.00	June	30	600.00	P1	750.00

Notes Payable (Page 15)

19—					19—				
June	25	Brown & Green	CD1 b	1,500.00	June	5	Brown & Green 20 da.	J1 b	1,500.00
						8	Dalton & Co. 30 da.	J1 c	300.00

Capital Stock (Page 20)

					19—				
					June	1		CR1	15,000.00
						1		J1	5,000.00
									20,000.00

Sales (Page 31)

					19—				
					June	8		CR1	2,000.00
						18		CR1	1,200.00
						30		CR1	500.00
						30		S1	4,470.00
									8,170.00

Returned Sales and Allowances (Page 32)

19—									
June	30		RS1	90.00					

Purchases (Page 41)

19—									
June	5		CD1	10,000.00					
	22		CD1	300.00					
	30		P1	9,750.00					
				20,050.00					

Returned Purchases and Allowances (Page 42)

					19—				
					June	30		RP1	300.00

Rent (Page 53)

19—									
June	15			250.00					

Wages (Page 54)

19—									
June	30			150.00					

Interest Income (Page 55)

					19—				
					June	22		CR1	4.00

Interest Expense (Page 56)

19— June	25		CD1	5 00			

Dividends (Page 61)

19— June	30		CD1	500 00			

Trial balance. The following trial balance was taken from the ledger. The numbers at the left are account page numbers. Showing them is optional.

THE GOOD MERCHANDISE COMPANY
Trial Balance
June 30, 19—

1	Cash	4,849 00	
3	J R Walton	675 00	
5	C E Magee	680 00	
6	D E Bailey	575 00	
7	Notes Receivable	600 00	
8	Inventory (June 1)	5,000 00	
11	Brown & Green		2,250 00
13	E R Walker		1,300 00
14	O L Bates		600 00
15	Notes Payable		300 00
20	Capital Stock		20,000 00
31	Sales		8,170 00
32	Returned Sales and Allowances	90 00	
41	Purchases	20,050 00	
42	Returned Purchases and Allowances		300 00
53	Rent	250 00	
54	Wages	150 00	
55	Interest Income		4 00
56	Interest Expense	5 00	
61	Dividends	500 00	
		33 424 00	33,424 00

Miscellaneous matters. In a large business, several pages of each book of original entry may be required to record the transactions of one month If the total of a book of original entry is to be posted at the end of the month, column totals should be forwarded from page to page. The following illustration indicates the method, forwardings are made in the other books of original entry in the same manner:

Sales Book (Page 1)

Date		L F	Name	Invoice No	Amount
19— June	1	7	Horace Bently	1	750 00
			(Other entries not detailed)		
			Forward		7,960 00

Sales Book (Page 2)

Date		L.F.	Name	Invoice No.	Amount
19—					
			Total brought forward		7,960 00
June	12	9	C. D. Williamson	26	325 00

It is, of course, unnecessary to foot the columns of the journal and forward the column totals; these column totals are not posted. (However, some bookkeepers do forward column totals of the journal, merely for the purpose of assuring themselves that the total debits and total credits for the month are equal.)

The totals of the sales book, returned sales and allowances book, purchase book, returned purchases and allowances book, cash receipts book, and cash disbursements book usually are not posted until the end of the month. But the individual entries in these books and in the journal should be posted as soon as possible after they are made. Good bookkeepers usually try not to let the posting work get more than one day behind.

It is very important to have the year appear at the head of each date column. This is sometimes forgotten, and difficulties may arise in the future in determining the year in which the transaction occurred.

CHAPTER 9

Special Columns in the Cash Books

Purposes of special columns The cash hooks illustrated in the preceding chapter were of the most simple form Special columns may he added to the cash books to serve the following general purposes

(1) To reduce the postings to accounts frequently credited in the cash receipts hook, or frequently dehited in the cash dis hursements hook

(2) To facilitate the recording of transactions which involve more than a single dehit and credit (These columns also reduce postings, since the column totals can be posted)

Special columns serving these purposes are illustrated in the remainder of this chapter

Columns in the Cash Receipts Book For Accounts Frequently Credited

Sales If cash sales are made frequently, it will be advantageous to provide a special credit column in the cash receipts book for Sales Observe that the following cash receipts book has two credit columns

One for credits to Sales
One for credits to all other accounts

Cash Receipts Book

Date		Account Credited	Explanation	Credits			Debit Cash
				Sundry		Sales	
				L F	Amount		
19—							
July	1	Capital Stock	Issued	27	10 000 00		10 000 00
	6	Sales	Cash sale			300 00	300 00
	19	Sales	Cash sale			175 00	175 00
	26	Sales	Cash sale			215 00	215 00

The credit to Capital Stock has been posted to page 27 of the ledger, the credits to Sales and the dehits to Cash will he included in the column totals posted to these accounts at the end of the month

Columns in the Cash Receipts Book To Facilitate Recording Transactions Which Involve More than One Debit and Credit

Discount on sales. Assume that Oscar Whitely owes us $700.00 on our invoice of July 1, and that we collect this amount on July 5, less 1% cash discount; the entry to record this transaction requires a credit of $700.00 to Whitely, a debit of $7.00 to Discount on Sales, and a debit of $693.00 to Cash. With a special debit column for Discount on Sales, the transaction can be recorded as follows:

Cash Receipts Book

Date		Account Credited	Explanation	Credits: Sundry L.F.	Credits: Sundry Amount	Credits: Sales	Debits: Discount on Sales	Debits: Cash
July	5	Oscar Whitely......	Inv., July 1, less 1%	16	700 00		7 00	693 00

The credit to Whitely has been posted to his account on page 16. The debits to Discount on Sales and Cash will be included in the column totals posted at the end of the month.

Freight out Assume that merchandise was sold to J B Turner on July 5 for $600 00, terms f o b destination At our request, Turner paid the freight, $15 00, and deducted it when making his remittance, which was received on July 9 The record of this transaction requires a credit of $600 00 to Turner, a debit of $15 00 to Freight Out, and a debit of $585 00 to Cash

With a special debit column for Freight Out in the cash receipts book, the transaction can be recorded as follows

Cash Receipts Book

Date		Account Credited	Explanation	Credits			Debits		
				Sundry		Sales	Discount on Sales	Freight Out	Cash
				L F	Amount				
July	9	J B Turner	Invoice July 5	17	600 00			15 00	585 00

The credit to Turner has been posted to his account on page 17 The debits to Freight Out and Cash will be included in the column totals posted at the end of the month

Collection and exchange. Assume that Thomas Hardy sent us a check for $2,000.00 to apply on account; when we deposited this check, the bank charged an exchange fee of $.25. The record of this transaction involves the following debits and credit:

Debits:		Credit:	
Collection and Exchange	$ .25	Thomas Hardy	$2,000.00
Cash	1,999.75		

Also assume that we held a $400.00 note signed by Leo Peterson, who lives in another city; that we left the note with our bank to be sent to a bank in Peterson's city to be collected; and that later the bank reported that it had collected the note and had credited our account with the proceeds, less a collection fee of $.50. The record of this transaction involves the following debits and credit:

Debits:		Credit:	
Collection and Exchange	$ .50	Notes Receivable	$400.00
Cash	399.50		

With a special debit column for Collection and Exchange in the cash receipts book, these transactions can be recorded in the manner illustrated below.

Cash Receipts Book

Date		Account Credited	Explanation	Credits: Sundry L.F.	Credits: Sundry Amount	Credits: Sales	Debits: Discount on Sales	Debits: Collection and Exchange	Debits: Freight Out	Debits: Cash
July	11	Thomas Hardy	On account	18	2,000 00			25		1,999 75
	15	Notes Receivable	Leo Peterson	20	400 00			50		399 50

The credits to Thomas Hardy and Notes Receivable have been posted. The debits to Collection and Exchange and Cash will be included in the column totals posted at the end of the month.

Discount, freight out, and exchange To illustrate further the use of some of the special columns in the cash receipts book already discussed, let us assume that, on July 10, we sold merchandise to D S Lambert for $940 00, terms f o b destination, and subject to 2% cash discount We requested Lambert to pay the freight and deduct the amount thereof in making his remittance On July 19 we received a check from him, in an amount computed as follows

Invoice	$940 00
Less 2% cash discount	18 80
Net	$921 20
Less freight	17 00
Remittance	$904 20

The bank charged $ 15 exchange on the check The record of this transaction involves the following debits and credit

Debits		Credit	
Discount on Sales	$ 18 80	D S Lambert	$940 00
Freight Out	17 00		
Collection and Exchange	15		
Cash	904 05		

The transaction is recorded in the cash receipts book as follows

Cash Receipts Book

Date		Account Credited	Explanation	Credits			Debits			
				Sundry		Sales	Discount on Sales	Collection and Exchange	Freight Out	Cash
				L F	Amount					
July	19	D S Lambert	Invoice July 10	19	940 00		18 80	15	17 00	904 05

The credit to Lambert has been posted to his account on page 19 The debits will be included in the column totals posted at the end of the month

Interest expense. Let us assume that, on July 20, we discounted a \$5,000.00 note payable at the bank; the note was due in 60 days; the discount rate was 6%; and the proceeds were \$4,950.00. The entry in the following cash receipts book credits Notes Payable \$5,000.00, debits Interest Expense (in a special column) \$50.00, and debits Cash \$4,950.00.

Cash Receipts Book

Date		Account Credited	Explanation	Credits			Debits				
				Sundry		Sales	Discount on Sales	Collection and Exchange	Freight Out	Interest Expense	Cash
				L.F.	Amount						
July	20	Notes Payable..........	Discounted at bank	25	5,000 00					50 00	4,950 00

Interest income. Assume that a note receivable from James Davis for $1,000 00 was collected on July 29, *together with $10 00 interest* *The entry in the following cash receipts book* contains a $1,000 00 credit to Notes Receivable, a $10 00 credit (in a special column) to Interest Income, and a $1,010 00 debit to Cash.

Cash Receipts Book

Date		Account Credited	Explanation	Credits: Sundry		Credits: Sales	Credits: Interest Income	Debits: Discount on Sales	Debits: Collection and Exchange	Debits: Freight Out	Debits: Interest Expense	Debits: Cash
				L F	Amount							
July	29	Notes Receivable	James Davis	20	1,000 00		10 00					1,010 00

Posting from the columnar cash receipts book. The following cash receipts book contains all the entries in the preceding illustrations. Observe that:

All the entries in the Sundry credit column have been posted individually, as shown by the account numbers in the L.F. column.

The totals of all columns except the Sundry column have been posted, as shown by the account numbers in parentheses at the bottom of the columns.

(Page 1)

Cash Receipts Book

Date		Account Credited	Explanation	Credits: Sundry L.F.	Credits: Sundry Amount	Credits: Sales	Credits: Interest Income	Debits: Discount on Sales	Debits: Collection and Exchange	Debits: Freight Out	Debits: Interest Expense	Debits: Cash
19—												
July	1	Capital Stock. . . .	Issued	27	10,000.00							10,000.00
	5	Oscar Whitely. . . .	Invoice, July 1, less 1%	16	700.00			7.00				693.00
	6	Sales.	Cash sale			300.00						300.00
	9	J. B. Turner.	Invoice, July 5	17	600.00					15.00		585.00
	11	Thomas Hardy. . . .	On account	18	2,000.00				.25			1,999.75
	15	Notes Receivable. . .	Leo Peterson	20	400.00				.50			399.50
	19	Sales.	Cash sale			175.00						175.00
	19	D. S. Lambert .	Invoice, July 10	19	910.00			18.80	.15	17.00		901.05
	20	Notes Payable . .	Discounted at bank	25	5,000.00						50.00	4,950.00
	26	Sales.	Cash sale			215.00						215.00
	29	Notes Receivable. .	James Davis	20	1,000.00		10.00					1,010.00
					20,610.00	690.00	10.00	25.80	.90	32.00	50.00	21,231.30
						(32)	(47)	(48)	(40)	(35)	(49)	(1)

Columns in the Cash Disbursements Book For Accounts Frequently Debited

Purchases; freight. If cash purchases and freight payments are made frequently, it may be desirable to provide special debit columns for them, as in the following illustration

Cash Disbursements Book

Date		Account Debited	Explanation	Debits: Sundry L.F.	Debits: Sundry Amount	Debits: Purchases	Debits: Freight In	Debits: Freight Out	Credits: Cash
19— July	5	Purchases	Cash purchase			900.00			900.00
	13	Freight	Freight bill, July 12				22.00		22.00
	17	Purchases	Cash purchases			820.00			820.00
	24	Freight	Freight bill, July 22				10.90	9.55	20.45

These special debit columns reduce posting work, because it is necessary to post only column totals.

Columns in the Cash Disbursements Book To Facilitate Recording Transactions Which Involve More than One Debit and Credit

Discount on purchases. Assume that we owed B. E. Brush $1,000.00 for an invoice purchased June 23, and that we paid the invoice on July 2, less 1% cash discount. The entry in the following cash disbursements book debits Brush $1,000.00, credits Discount on Purchases (in a special column) $10.00, and credits Cash $990.00. The debit to Brush has been posted to his account, on page 24; the credits will be included in the column totals posted at the end of the month.

Cash Disbursements Book

Date		Account Debited	Explanation	Debits					Credits	
				Sundry		Purchases	Freight In	Freight Out	Discount on Purchases	Cash
				L.F.	Amount					
July	2	B. E. Brush....................	Invoice, June 23	21	1,000.00				10.00	990.00

Interest expense. On July 28 we paid Hudson Co a $1,500 00 note, and interest amounting to $7 50 The entry in the following cash disbursements book contains a $1,500 00 debit to Notes Payable, a $7 50 debit (in a special column) to Interest Expense, and a $1,507 50 credit to Cash

Cash Disbursements Book

Date		Account Debited	Explanation	Debits						Credits	
				Sundry		Purchases	Freight In	Freight Out	Interest Expense	Discount on Purchases	Cash
				L F	Amount						
July	28	Notes Payable	Hudson Co	25	1,500 00				7 50		1,507 50

Posting from the columnar cash disbursements book. The following cash disbursements book contains all the entries in the preceding illustrations. Observe that:

All the entries in the Sundry debit column have been posted individually, as shown by the account numbers in the L.F. column.

The totals of all columns except the Sundry column have been posted, as shown by the account numbers in parentheses at the bottom of the columns.

Cash Disbursements Book

Date		Account Debited	Explanation	Debits: Sundry L.F.	Debits: Sundry Amount	Debits: Purchases	Debits: Freight In	Debits: Freight Out	Debits: Interest Expense	Credits: Discount on Purchases	Credits: Cash
19 –											
July	2	B. E. Brush	Invoice, June 23	21	1,000.00					10.00	990.00
	5	Purchases	Cash purchase			960.00					960.00
	13	Freight	Freight bill, July 12				22.90				22.90
	17	Purchases	Cash purchase			820.00					820.00
	23	Freight	Freight bill, July 22				19.80	9.65			29.45
	28	Notes Payable	Hudson Co.	25	1,500.00				7.50		1,507.50
					2,500.00	1,780.00	42.70	9.65	7.50	10.00	4,329.85
						(33)	(34)	(35)	(49)	(46)	(1)

Miscellaneous Matters

Cross-footing columnar books of original entry Before posting column totals of any book of original entry containing debit and credit columns you should always be sure that the sum of the debit column totals agrees with the sum of the credit column totals, by a computation (which may be made on scratch paper) similar to the following proof of the equality of the debits and credits in the cash disbursements book on page 115.

Debits	Credits
\$2 500 00	\$ 10 00
1 780 00	4 329 85
42 70	
9 65	
7 50	
\$4 339 85	\$4 339 85

Determining the equality of the debit and credit totals of columnar books of original entry should never be omitted if they are not in balance the trial balance will not balance, and a great amount of work may have to be done before the error is located

Special columns to be used You should understand that the special columns shown in this chapter are purely illustrative The special columns to be used in the cash books of a business will depend on the nature of the business and the frequency of certain types of cash transactions

CHAPTER 10

Controlling Accounts

Division of labor. If a business is so large that one bookkeeper cannot make all the postings, the ledger may be divided into sections so that two or more bookkeepers can do the postings. This frequently is accomplished by:

Keeping all accounts with customers in a separate ledger called an *accounts receivable ledger;* and
Keeping all accounts with trade creditors in a separate ledger called an *accounts payable ledger.*

When this is done, the accounts receivable ledger and the accounts payable ledger are called *subsidiary ledgers,* and the ledger containing the remaining accounts is called the *general ledger.*

Postings to the subsidiary ledgers usually are made by assistant bookkeepers; postings to the general ledger usually are made by the head bookkeeper.

Controlling accounts. When the two subsidiary ledgers mentioned above are used, it is customary to keep the two following accounts in the general ledger:

Accounts Receivable—the balance of this account shows the total amount receivable from all customers.
Accounts Payable—the balance of this account shows the total amount payable to all trade creditors.

You may think that posting to the subsidiary ledgers and also to the controlling accounts involves a great deal of duplicate work. However, this is not the case. The books of original entry are provided with special columns for the controlling accounts; the assistant bookkeepers post the individual entries in these columns to the accounts in the subsidiary ledgers; the head bookkeeper posts the column totals to the controlling accounts in the general ledger.

The controlling accounts are so called because they enable the head bookkeeper to test the accuracy of the work of his assistants. The head bookkeeper exercises this control by seeing that the subsidiary ledgers are in agreement with their controls; that is, by seeing that:

The sum of the balances in the accounts receivable ledger is equal to the balance of the Accounts Receivable controlling account; and that

The sum of the balances in the accounts payable ledger is equal to the balance of the Accounts Payable controlling account.

Controlling accounts help in locating errors Without controlling accounts, it would be necessary to take a combined trial balance of the general ledger and the subsidiary ledgers If it did not balance, all the bookkeepers would have to check their postings in a search for errors With controlling accounts, the three ledgers can be proved separately, as follows

General ledger—by taking a trial balance
Subsidiary ledgers—by seeing that they are in agreement with their related controlling accounts

Subsidiary ledger rulings The ledger form most frequently used for personal accounts in the two subsidiary ledgers is provided with a column to show the balance after each transaction Two illustrations are given below Hudson's account is in the accounts receivable ledger, Murphy's account is in the accounts payable ledger. The purpose of each column may be indicated in a box heading, as in the first illustration or the box headings may be omitted, as in the second illustration.

C E Hudson

Date		Explanation	Folio	Debit	Credit	Balance
19—						
June	2		S1	600 00		600 00
	11		CR1		600 00	—
	19		S1	760 00		760 00
	23		RS1		35 00	725 00
	28		CR1		725 00	—
July	6		S1	495 00		495 00

T O Murphy

19—						
Oct	4		P1		975 00	975 00
	17		CD1	975 00		—
	22		P1		856 00	856 00
	25		RP1	20 00		836 00
Nov	1		CD1	836 00		—
	9		P1		425 00	425 00

If a balance appears in an account in the accounts receivable ledger, it is assumed to be a debit balance, if an account should have a credit balance, this fact may be indicated by writing "Cr" after the amount of the balance Similarly, an account in the accounts payable subsidiary ledger is assumed to have a credit balance, a debit balance may be indicated by writing "Dr." after the balance

If the balance in an account is composed of unsettled balances from more than one invoice, the bookkeeper may use letters to aid him in determining the elements of the account balance. The procedure is illustrated below:

B. R. Riley

19—								
Nov.	13		S1	a	295 00			295 00
	16		RS1			a	15 00	280 00
	19		S1	b	300 00			580 00
	24		S1	c	179 00			759 00
	26		RS1			c	13 00	746 00
	28		CR1			b	300 00	446 00

The $446.00 balance in the account consists of the following elements:

Invoice, November 13	$295.00	
Less credit on November 16.................... ..	15.00	$280.00
Invoice, November 24... .. .	$179.00	
Less credit on November 26.....	13.00	166.00
Total..........................		$446.00

Illustration. The procedure of posting to the three ledgers and determining that they are in balance is illustrated on the following pages. You should trace all the postings from the various books of original entry, on pages 120 to 125, to the three ledgers, which appear on the pages indicated below:

General ledger,	(126, 127)
Accounts receivable ledger,	(127, 128)
Accounts payable ledger.	(128)

Sales book. Following is the illustrative sales book.

Sales Book (Page 1)

Date		√	Name	Invoice No.	Amount
19—					
May	2	√	R. E. West....	1	800 00
	7	√	G. O. Davis..	2	450 00
	12	√	S. E. Bates.............	3	600 00
	18	√	R. E. West..................	4	850 00
	23	√	G. O. Davis.......................	5	280 00
	30	√	R. E. West..	6	300 00
					3,280 00
					(2) (7)

During the month, the individual entries were posted to the debit of the customers' accounts in the subsidiary accounts receivable ledger. The accounts in the subsidiary ledger

usually are arranged in alphabetical order and are not numbered Since there are no subsidiary ledger page numbers, the subsidiary ledger bookkeeper indicates that postings have been made by entering check marks in a √ column in the books of original entry

At the end of the month, the column total was posted

To the debit of Accounts Receivable controlling account—page 2 of the general ledger
To the credit of Sales account—page 7 of the general ledger

Returned sales and allowances book Following is the returned sales and allowances book

Returned Sales and Allowances Book (Page 1)

Date		√	Name	Credit Memo No	Amount
19—					
May	3	√	R. E West	1	40 00
	14	√	S E Bates	2	50 00
	28	√	G O Davis	3	25 00
					115 00
					(8) (2)

During the month, the individual entries were posted to the credit of the customers accounts in the subsidiary accounts receivable ledger
At the end of the month, the column total was posted
To the debit of Returned Sales and Allowances account—page 8 of the general ledger
To the credit of Accounts Receivable controlling account—page 2 of the general ledger

Purchase book Following is the purchase book

Purchase Book (Page 1)

Date		√	Name	Invoice Date		Amount
19—						
May	1	√	Price and Holmes	May	1	2 000 00
	9	√	Henderson s Inc		8	3 500 00
	13	√	Osborne Company		10	2 600 00
	18	√	Price and Holmes		16	650 00
	24	√	Henderson s Inc		23	1 300 00
						10 050 00
						(9) (4)

During the month, the individual entries were posted to the credit of the creditors' accounts in the subsidiary accounts payable ledger.

At the end of the month, the column total was posted:

To the debit of the Purchases account—page 9 of the general ledger.

To the credit of the Accounts Payable controlling account—page 4 of the general ledger.

Returned purchases and allowances book. Following is the returned purchases and allowances book.

Returned Purchases and Allowances Book (Page 1)

Date		✓	Name	Explanation	Amount
19—					
May	5	✓	Price and Holmes..	Their credit memo 46	150 00
	18	✓	Osborne Company..	Their letter May 17	500 00
					650 00
					(4) (10)

During the month, the individual entries were posted to the debit of the creditors' accounts in the accounts payable subsidiary ledger.

At the end of the month, the column totals were posted:

To the debit of the Accounts Payable controlling account—page 4 of the general ledger.

To the credit of the Returned Purchases and Allowances account—page 10 of the general ledger.

Cash receipts book. The cash receipts book on page 122 does not contain any of the special columns illustrated in the preceding chapter except the Discount on Sales debit column. Other special columns illustrated in the preceding chapter have been eliminated to focus attention on the controlling account procedures.

The cash receipts book contains two credit columns:

General Ledger—in this column are entered the amounts of the credits to all accounts other than accounts receivable.

Accounts Receivable—this column serves two purposes:

(1) The accounts receivable subsidiary ledger bookkeeper can easily find the items that are to be posted to the accounts receivable subsidiary ledger.

(2) The general ledger bookkeeper can post the total of the column to the Accounts Receivable controlling account.

Cash Receipts Book (Page 1)

Date		Account Credited	Explanation	Credits: General Ledger L F	Credits: General Ledger Amount	Credits: Accounts Receivable ✓	Credits: Accounts Receivable Amount	Debits: Discount on Sales	Debits: Cash
19—									
May	1	Capital Stock	Investment	0	25 000.00				25 000.00
	3	Sales	Cash sale	7	150.00				150.00
	7	R T West	Invoice May 2			✓	200.00		200.00
	12	Sales	Cash sale	7	500.00				500.00
	17	G O Davis	Invoice May 7 less 1%			✓	150.00	4.50	445.50
	20	Notes Receivable	R T West note	3	500.00				500.00
	24	R T West	Invoice May 18, less 1%			✓	850.00	8.50	841.50
	31	Sales	Cash sale	7	400.00				400.00
					26 550.00		1 500.00	13.00	28 097.00
							(2)	(13)	(1)

Postings during the month:

The head bookkeeper posted the entries in the General Ledger column to the credit of the accounts named under "Account Credited."

The assistant bookkeeper posted the entries in the Accounts Receivable column to the credit of the accounts named under "Account Credited."

Postings at the end of the month:

The head bookkeeper posted column totals to accounts in the general ledger, as follows:

Accounts Receivable column—to the credit of the Accounts Receivable controlling account, page 2.

Discount on Sales column—to the debit of the Discount on Sales account, page 13.

Cash column—to the debit of the Cash *account, page* 1.

Cash disbursements book. The cash disbursements book on page 124 contains two debit columns:

General Ledger—in this column are entered the amounts of the debits to all accounts other than accounts payable.

Accounts Payable—this column serves two purposes:

(1) The accounts payable subsidiary ledger bookkeeper can easily find the items that are to be posted to the accounts payable subsidiary ledger.

(2) The general ledger bookkeeper can post the total of the column to the Accounts Payable controlling account.

Postings during the month:

The head bookkeeper posted the entries in the General Ledger column to the debit of the accounts named under "Account Debited."

The assistant bookkeeper posted the entries in the Accounts Payable column to the debit of the accounts named under "Account Debited."

Postings at the end of the month:

The head bookkeeper posted column totals to accounts in the general ledger, as follows:

Accounts Payable column—to the debit of the Accounts Payable controlling account, page 4.

Discount on Purchases—to the credit of the Discount on Purchases account, page 14.

Cash—to the credit of the Cash account, page 1.

Cash Disbursements Book

(Page 1)

Date		Account Debited	Explanation	Debits: General Ledger L F	Debits: General Ledger Amount	Debits: Accounts Payable ✓	Debits: Accounts Payable Amount	Credits: Discount on Purchases	Credits: Cash
19—									
May	1	Purchases	Cash purchase	9	5,000 00				5,000 00
	1	Store Rent	For May	11	300 00				300 00
	7	Price and Holmes	Invoice, May 1, less 2%			✓	850 00	17 00	833 00
	10	Purchases	Cash purchase	9	500 00				500 00
	16	Henderson's, Inc	Invoice, May 9, less 1%			✓	3,500 00	35 00	3,465 00
	16	Salesmen's Salaries		12	200 00				200 00
	19	Osborne Company	On account			✓	500 00		500 00
	25	Notes Payable	Price and Holmes	5	1,000 00				1,000 00
	26	Purchases		9	350 00				350 00
	31	Salesmen's Salaries		12	200 00				200 00
					7,550 00		4,850 00	52 00	12,348 00
							(4)	(14)	(1)

Journal. To facilitate the postings to the controlling accounts, it is desirable to use a six-column journal which is provided with special debit and credit columns for each controlling account. The form is illustrated below, and the posting procedure is explained on page 126.

Journal

Debits			Date		L.F.		Credits		
Accounts Receivable	Accounts Payable	General Ledger					General Ledger	Accounts Payable	Accounts Receivable
			19—						
		500 00	May	5	3	Notes Receivable			500 00
					✓	R. E. West			
						Received a 15-day, non-interest note to apply on account.			
	1,000 00			7	✓	Price and Holmes	1,000 00		
					5	Notes Payable			
						Gave them an 18-day, non-interest note to apply on account.			
		550 00		15	3	Notes Receivable			550 00
					✓	S. E. Bates			
						Received a 30-day, 6% note to apply on account.			
	1,000 00	1,050 00					1,000 00		1,050 00
	(1)								(2)

Postings from the journal were made as follows

During the month

Entries in the Accounts Receivable columns were posted to accounts in the subsidiary accounts receivable ledger

Entries in the Accounts Payable columns were posted to accounts in the subsidiary accounts payable ledger

Entries in the General Ledger columns were posted to accounts in the general ledger

At the end of the month, totals of the Accounts Receivable and *Accounts Payable columns were posted to the controlling accounts—Accounts Receivable on page 2, and Accounts Payable on page 4*

General ledger The general ledger accounts appear below

Cash (Page 1)

19—					19—				
May	31		CI 1	25,097 00	May	31		CD1	12,348 00

Accounts Receivable (Page 2)

19—					19—				
May	31		S1	3,280 00	May	31		RS1	115 00
						31		CR1	1,560 00
						31		J1	1 000 00

Notes Receivable (Page 3)

19—					19—				
May	5	R. E. West	J1	500 00	May	20	R. E. West	CP1	500 00
	15	S. E. Bates	J1	500 00					

Accounts Payable (Page 4)

19—					19—				
May	31		PP1	600 00	May	31		P1	10 000 00
	31		CD1	4,850 00					
	31		J1	1 000 00					

Notes Payable (Page 5)

19—					19—				
May	25	Price and Holmes	CD1	1 000 00	May	7	Price and Holmes	J1	1 000 00

Capital Stock (Page 6)

					19—				
					May	1		CR1	25 000 00

Sales (Page 7)

					19—				
					May	3		CI 1	150 00
						12		CR1	500 00
						31		CP1	400 00
						31		S1	3 280 00

Returned Sales and Allowances (Page 8)

19—									
May	31		RS1	115.00					

Purchases (Page 9)

19—									
May	1		CD1	5,000.00					
	10		CD1	500.00					
	26		CD1	350.00					
	31		P1	10,050.00					

Returned Purchases and Allowances (Page 10)

					19—				
					May	31		RP1	650.00

Store Rent (Page 11)

19—									
May	1		CD1	300.00					

Salesmen's Salaries (Page 12)

19—									
May	16		CD1	200.00					
	31		CD1	200.00					

Discount on Sales (Page 13)

19—									
May	31		CR1	13.00					

Discount on Purchases (Page 14)

					19—				
					May	31		CD1	32.00

Accounts receivable ledger. After postings from the books of original entry are completed, the subsidiary accounts receivable ledger appears as follows:

S. E. Bates

19—						
May	12		S1	600.00		600.00
	14		RS1		50.00	550.00
	15		J1		550.00	—

G. O. Davis

19—						
May	7		S1	450.00		450.00
	15		CR1		450.00	—
	23		S1	280.00		280.00
	28		RS1		25.00	255.00

R. E. West

19—						
May	2		S1	800 00		800 00
	3		RS1		40 00	760 00
	5		CR1		260 00	500 00
	5		J1		500 00	—
	18		S1	850 00		850 00
	21		CR1		850 00	—
	30		S1	300 00		300 00

Accounts payable ledger. The subsidiary accounts payable ledger, after the completion of the postings from the books of original entry, appears as follows

Henderson's, Inc.

19—						
May	9		P1		3,500 00	3,500 00
	16		CD1	3,500 00		—
	24		P1		1,300 00	1,300 00

Osborne Company

19—						
May	13		P1		2,600 00	2,600 00
	18		RP1	500 00		2,100 00
	19		CD1	500 00		1,600 00

Price and Holmes

19—						
May	1		P1		2,000 00	2,000 00
	5		RP1	150 00		1,850 00
	7		CD1	850 00		1,000 00
	7		J1	1,000 00		—
	18		P1		650 00	650 00

Proving the ledgers. Following is the trial balance of the general ledger:

General Ledger Trial Balance
May 31, 19—

Cash ..	15,749 00	
Accounts Receivable	555 00	
Notes Receivable	550 00	
Accounts Payable		3,550 00
Capital Stock		25,000 00
Sales....		4,330 00
Returned Sales and Allowances	115 00	
Purchases	15,900 00	
Returned Purchases and Allowances		650 00
Store Rent	300 00	
Salesmen's Salaries	400 00	
Discount on Sales	13 00	
Discount on Purchases		52 00
	33,582 00	33,582 00

Cash Disbursement Book

Date		Account Debited	Explanation	Debits							Credits	
				General Ledger		Accounts Receivable		Accounts Payable			Discount on Purchases	Cash
				L.f.	Amount	√	Amount	√	Amount			
19— Aug.	5	Purchases		9	500.00							500.00
	11	Price and Holmes	On account					√	300.00		3.00	297.00
	15	Salesmen's Salaries		12	200.00							200.00
	19	Price and Holmes	Invoice August 12					√	250.00		2.50	247.50
	20	G. O. Davis	Overpayment			√	25.00					25.00
	23	Purchases		9	450.00							450.00
	25	S. L. Bates	Overpayment			√	15.00					15.00
	31	Salesmen's Salaries		12	200.00							200.00
					1,350.00		40.00		550.00		5.50	1,934.50
							(2)		(4)		(14)	(1)

(Note the special Accounts Receivable controlling account debit column, which may be used if cash payments are frequently made to customers.)

Cash Disbursements Book

Date		Account Debited	Explanation	Debits: General Ledger L.F.	Debits: General Ledger Amount	Debits: Accounts Payable √	Debits: Accounts Payable Amount	Credits: Discount on Purchases	Credits: Cash
19—									
Aug.	5	Purchases		9	500 00				500 00
	11	Price and Holmes	On account			√	300 00	3 00	297 00
	15	Salesmen's Salaries		12	200 00				200 00
	19	Price and Holmes	Invoice, August 12			√	250 00	2 50	217 50
	20	G. O. Davis/Accounts Receivable	Overpayment	√/2	25 00				25 00
	23	Purchases		9	450 00				450 00
	25	S. E. Bates/Accounts Receivable	Overpayment	√/2	15 00				15 00
	31	Salesmen's Salaries		12	200 00				200 00
					1,390 00		550 00	5 50	1,931 50
							(1)	(11)	(1)

The check marks and the ledger page numbers (√/2) appearing in the L.F. column show that the accounts receivable bookkeeper and the general ledger bookkeeper have posted these entries.

the controlling account affected Great care should be exercised to see that items of this nature are posted to *both* ledgers, since failure to make both postings will throw the subsidiary ledger out of agreement with its control

Cash books with controlling account columns and other special columns The cash books on pages 133 and 134 contain all the special columns shown in the illustrations in Chapter 9 and controlling account columns for Accounts Receivable and Accounts Payable

Locating errors When subsidiary ledgers and controlling accounts are used, it usually is possible to determine which ledger contains an error and which bookkeeper should be charged with the responsibility of locating it For example

If the general ledger is in balance, and the accounts receivable schedule agrees with its control, but the accounts payable schedule does not agree with its control, an error is indicated in the accounts payable ledger

If the general ledger is in balance and the accounts payable schedule agrees with its control but the accounts receivable schedule does not agree with its control, an error is indicated in the accounts receivable ledger

If the general ledger is not in balance, but the subsidiary ledgers are in agreement with their controls an error is indicated in the general ledger, and this error is presumably not in the controlling accounts

If the general ledger is not in balance, and the subsidiary ledgers are not in agreement with their controls, it usually is advisable to look for errors in the general ledger first When these errors are found and the general ledger is in balance it may be found that the corrected balances in the controlling accounts will be in agreement with the subsidiary ledgers if not a search must be made for errors affecting the subsidiary ledgers

Following is an outline of the procedures to be applied for the purpose of locating errors

(A) When the general ledger trial balance does not balance, perform the following operations, in the order indicated

(1) Refoot the general ledger trial balance

(2) Compare the balances shown by the trial balance with those shown by the accounts in the general ledger

(3) Check the computation of the balances of the general ledger accounts (Continued on page 135)

Cash Receipts Book

Date		Account Credited	Explanation	Credits: Sundry J.F.	Credits: Sundry Amount	Credits: Sales	Credits: Interest Income	Credits: Accounts Receivable √	Credits: Accounts Receivable Amount	Debits: Discount on Sales	Debits: Collection and Exchange	Debits: Freight Out	Debits: Interest Expense	Debits: Cash
19—														
Aug.	1	Capital Stock	Investment	17	50,000.00									50,000.00
	8	Sales				500.00								500.00
	12	D. R. Matthews	Invoice, Aug. 3					√	4,000.00	10.00		70.00		3,890.00
	17	Sales				1,000.00								1,000.00
	23	George Bailey	Invoice, Aug. 15					√	3,000.00	30.00	.25	50.00		2,919.75
	25	Notes Receivable	J. B. Lakin	3	2,400.00		4.00							2,404.00
	27	Notes Receivable	C. E. Weldon	3	4,000.00		8.00				.20			4,007.80
	30	Notes Payable	Bank loan	12	5,000.00								50.00	4,950.00
					61,400.00	1,500.00	12.00		7,000.00	70.00	.45	120.00	50.00	69,671.55
						(21)	(41)		(2)	(51)	(39)	(35)	(52)	(1)

Cash Disbursements Book

Date		Account Debited	Explanation	Debits: Sundry L F	Sundry Amount	Purchases	Freight In	Freight Out	Interest Expense	Accounts Payable ✓	Accounts Payable Amount	Credits: Discount on Purchases	Cash
19—													
Aug	1	Store Rent	For August	38	300.00								300.00
	2	Purchases				5,000.00							5,000.00
	3	Freight					60.00	25.00					85.00
	5	Purchases				2,000.00							2,000.00
	15	Notes Payable	C F Warner	12	12,000.00				20.00				12,020.00
	17	Mays & Dalton	Invoice, August 8, less 2%							✓	7,500.00	150.00	7,350.00
	18	Purchases				1,500.00							1,500.00
	19	Freight					40.00	35.00					75.00
	25	Notes Payable	Barton & Company	12	15,000.00				50.00				15,050.00
	26	G B Hunt	Invoice, August 19, less 2%							✓	6,000.00	120.00	5,880.00
					27,300.00	8,500.00	100.00	60.00	70.00		13,500.00	270.00	49,260.00
						(31)	(32)	(35)	(52)		(11)	(42)	(1)

(4) Check the postings to the general ledger.

(5) Refoot the books of original entry which have only one column.

(6) See whether the sum of the totals of the debit columns is equal to the sum of the totals of the credit columns of the columnar books of original entry; if they are not in balance, refoot each column. If this does not disclose the error, see whether the debits and credits in each entry are equal.

See whether any amounts are entered in wrong columns of columnar books of original entry.

(B) When the general ledger is in balance but a subsidiary ledger is out of agreement with its control:

(1) Refoot the schedule of the subsidiary ledger.

(2) See that the balances were carried correctly from the subsidiary ledger to the schedule.

(3) Recompute the balance of each subsidiary ledger account.

(4) Check the postings to the subsidiary ledger.

CHAPTER 11

Accrued and Deferred Items

Income and expense applicable to a period. In the preceding chapters you have learned something about the preparation of the principal statements of a business: the statement of profit and loss (or the statement of income and expense), showing the results of operations during a period; and the balance sheet, showing the financial condition of the business at the end of the period. You have also learned something about the mechanics of keeping accounting records which furnish information required for the preparation of these statements.

But accounting is something more than mechanics. The statement of profit and loss will not fairly reflect the results of operations during a period, and the balance sheet will not fairly reflect the financial condition at the end of the period, unless the records are kept in conformity with recognized *principles of accounting.*

As an introduction to the principles of accounting, it may be said that neither the balance sheet nor the statement of profit and loss will be correct unless income is allocated to the period in which it is earned, and unless expenses are allocated to the period in which they are incurred.

This may seem to you to be so obvious a truism that it scarcely merits mentioning. But as you progress in the study of accounting you will learn that many matters must be considered in answering the questions: When is income earned? When are expenses incurred?

In this chapter we are to consider one of these matters: the difference between the cash basis and the accrual basis of accounting.

The cash and accrual bases of accounting. On the cash basis of accounting, income is allocated to the period in which it is collected, and expenses are allocated to the period in which they are paid. For instance, assume that a man bought an apartment building on January 1, 1949 and that, during the year, he collected $15,000.00 of rentals and paid $13,000.00 for expenses. On the cash basis of accounting he would compute his income, expense, and net income as follows:

Rental income collected	$15,000 00
Expenses paid	13,000 00
Net income	$ 2,000 00

But assume that he had made advance collections of $700.00 from three tenants for January, 1950 rentals, and that he had not paid the janitor's wages for the last half of December, in the amount of $150.00. On the accrual basis of accounting he would compute his income, expenses, and net income for 1949 as follows:

Rental income:		
Amount collected	$15,000.00	
Less rent collected in advance, which will not be earned until 1950	700.00	
Rental income earned		$14,300.00
Expenses:		
Amount paid	$13,000.00	
Add janitor's wages for last half of December, 1949	150.00	
Expenses incurred		13,150.00
Net income		$ 1,150.00

It is obvious that the accrual basis of accounting reflects the income earned, the expenses incurred, and the net income more truly than the cash basis.

The rent collected in advance is deferred income; there may also be deferred expenses. The unpaid wages are an accrued expense; there may also be accrued income. The accrual basis of accounting recognizes accrued income and expense and deferred income and expense.

The remainder of this chapter contains an explanation of the procedures that may be used to give proper recognition to accrued and deferred items; it shows also that the balance sheet, as well as the profit and loss statement, will be incorrect unless proper recognition is given to them.

Accrued Expense

Nature of expense accruals. The word *accrue*, as used in accounting, means to accumulate with the passage of time.

An *accrued expense* is an expense which has accumulated with the passage of time and has not been paid. For example, assume that a company employed an office clerk at $60.00 per week—which is at the rate of $10.00 per day; assume also that the last payment of wages was made on December 28; the accrued wages for the 29th, 30th, and 31st amount to $30.00.

The expenses *incurred* during a period include the accrued expenses. Therefore, before the profit and loss statement is prepared and the books are closed at the end of any period, the bookkeeper should consider whether there are any accrued expenses. If there

is an accrued expense, the proper expense account should be debited In the preceding illustration, the Office Salaries account should be debited $30 00

An *accrued liability* is a debt which has accumulated with the passage of time If there is an accrued expense there always is an accompanying accrued liability Obviously, the liability should be recorded as well as the expense In the preceding illustration, an Accrued Salaries Payable account should be credited $30 00

A journal entry made at the end of a period to record an accrued expense and an accrued liability is called an *adjusting entry* The adjusting entry for the accrued salary in the preceding illustration is

Office Salaries	30 00	
Accrued Salaries Payable		30 00
To record the expense and liability for the accrued office salary for the last three days of December		

Adjusting, closing, and reversing entries If an expense account is affected by an accrual the closing procedure at the end of the period involves *three* journal entries

(1) *An adjusting entry* to record the accrued expense and the accrued liability
(2) *A closing entry* transferring the adjusted balance of the expense account to Profit and Loss
(3) *A reversing entry* The nature and purpose of this entry is explained later

Illustration Assume that the following account shows the total office salaries *paid* during 1948

Office Salaries

1948		Total paid		3 100 00			

(1) *Adjusting entry*

The salary accrual is $30 00 Before the books are closed the following adjusting journal entry should be made

Dec 31	Office Salaries	30 00	
	Accrued Salaries Payable		30 00
	To record the expense and the liability for accrued salaries.		

After this entry is posted the two accounts* affected appear as shown on page 139

* The italics in each pair of ledger accounts indicate the debits and the credits resulting from posting the immediately preceding journal entry

Office Salaries

1948							
		Total paid	3,100 00				
Dec.	31	Accrued	30 00				

The balance in this account now shows the total office salaries expense *incurred* during the year.

Accrued Salaries Payable

				1948			
				Dec.	*31*	*Accrued*	*30 00*

The balance in this account shows the accrued liability at the end of the year; it will appear on the liability side of the balance sheet.

(2) *Closing entry:*

The Office Salaries account is closed to Profit and Loss by the following entry:

Dec. 31	Profit and Loss	3,130.00	
	Office Salaries		3,130.00
	To close.		

After this entry is posted, the expense account and the liability account appear as follows:

Office Salaries

1948				*1948*			
		Total paid	3,100 00	*Dec.*	*31*	*To P. & L.*	*3,130 00*
Dec.	31	Accrued	30 00				
			3,130 00				3,130 00

Accrued Salaries Payable

				1948			
				Dec.	31	Accrued	30 00

Since this is a liability account, it is not affected by the closing entry.

(3) *Reversing entry:*

After the books are closed, the following reversing entry should be made, under date of January 1, 1949:

Jan. 1—Accrued Salaries Payable	30.00	
Office Salaries		30.00
To reverse the adjusting entry.		

After the reversing entry is posted, the expense and liability accounts appear as follows:

Office Salaries

1948					1948				
		Total paid		3,100 00	Dec.	31	To P. & L.		3,130 00
Dec	31	Accrued		30 00					
				3,130 00					3,130 00
					1949				
					Jan	*1*	*Accrued*		*30 00*

Accrued Salaries Payable

1949					1948				
Jan	*1*	*Reversal*		*30 00*	Dec	31	Accrued		30 00

The purpose of this reversing entry can be explained by showing the expense account after it has been charged with a $70.00 salary payment made on January 4, 1949 which included the $30.00 accrued on December 31.

Office Salaries

1948					1948				
		Total paid		3,100 00	Dec	31	To P. & L		3,130 00
Dec	31	Accrued		30 00					
				3,130 00					3,130 00
1949					1949				
Jan	4	Paid		70 00	Jan	1	Accrued		30 00

This account now has a debit balance of $40.00, representing the portion of the January 4 salary payment which is an expense of 1949.

Accrued Income

Nature of income accruals. *Accrued income* is income which has accumulated with the passage of time and has not been collected. For example, assume that, on December 11, a company received a $6,000.00 note receivable due in 60 days and bearing 6% interest. The interest will not be *collected* until February 9, but it is *earned* at the rate of $1.00 a day. The income accrued on December 31 is $20.00.

The income *earned* during a period includes any accrued income. Therefore, before the profit and loss statement is prepared and the books are closed at the end of any period, the bookkeeper should consider whether there are any items of accrued income. If there is an accrued income, the proper income account should be credited. In the preceding illustration the Interest Income account should be credited $20.00.

An *accrued receivable* is a receivable which has accumulated with the passage of time. If there is an accrued income there is always an accompanying accrued receivable. Obviously, the receivable should be recorded as well as the income. In the preceding illustration, an Accrued Interest Receivable account should be debited $20.00. The adjusting entry for the accrued interest is:

Accrued Interest Receivable	20.00	
Interest Income		20.00
To record the asset and income of accrued interest on notes receivable.		

Adjusting, closing, and reversing entries. If an income account is affected by an accrual, the closing procedure involves three journal entries: an adjusting entry, a closing entry, and a reversing entry.

Illustration. The credit in the following account shows the total interest *collected* during 1948:

Interest Income

				1948	Total collected		300 00

(1) *Adjusting entry:*

The accrued interest on a note receivable amounts to $20.00. The following adjusting journal entry should be made:

Dec. 31	Accrued Interest Receivable . . .	20.00	
	Interest Income		20.00
	To record the asset and the income of accrued interest on a note receivable.		

After this entry is posted, the two accounts affected appear as follows:

Interest Income

				1948	Total collected		300 00
				Dec. 31	*Accrued*		*20 00*

The balance in this account now shows the total interest income *earned* during the year.

Accrued Interest Receivable

1948							
Dec. 31	*Accrued*		20 00				

The balance in this account represents an asset at the end of the year.

(2) *Closing entry*

The Interest Income account is closed to Profit and Loss by the following entry

Dec 31	Interest Income	320 00	
	Profit and Loss		320 00
	To close		

After this entry is posted, the income account and the asset account appear as follows

Interest Income

1948				1948			
Dec	*31*	*To P & L*	*320 00*	Dec	31	Total collected	300 00
				Dec	31	Accrued	20 00
			320 00				320 00

Accrued Interest Receivable

1948							
Dec	31	Accrued	20 00				

Since this is an asset account, it is not affected by the closing entry

(3) *Reversing entry*

After the books are closed, the following journal entry should be made, under date of January 1, 1949, to reverse the adjusting entry

Jan. 1—*Interest Income*		*20 00*	
	Accrued Interest Receivable		20 00
	To reverse the adjusting entry		

This reversing entry is exactly the opposite of the adjusting entry After it is posted, the income account and the asset account appear as follows

Interest Income

1948				1948			
Dec	31	To P & L	320 00			Total collected	300 00
				Dec	31	Accrued	20 00
			320 00				320 00
1949							
Jan	*1*	*Accrued*	*20 00*				

Accrued Interest Receivable

1948				*1949*			
Dec	31	Accrued	20 00	*Jan*	*1*	*Reversal*	*20 00*

The purpose of this reversing entry can be explained by showing the income account after it has been credited with \$60.00 of interest collected on February 9, 1949, which included the \$20.00 accrued on December 31, shown as a debit in the Interest Income account:

Interest Income

1948				1948			
Dec.	31	To P. & L.	320 00			Total collected	300 00
				Dec.	31	Accrued	20 00
			320 00				320 00
1949				1949			
Jan.	1	Accrued	20 00	Feb.	9	Collected	60 00

This account now has a credit balance of \$40.00, representing the portion of the February 9 collection which was earned during 1949.

Deferred Expense

Nature of deferred expense. The expense *incurred* during a period may be less than the amount *paid.* Assume, for example, that a company paid \$600.00 on January 1, 1948 as premium on a three-year fire insurance policy, and charged this amount to the Insurance (expense) account. The \$600.00 debit balance in the Insurance account on December 31, 1948 consists of two elements:

\$200.00 representing the insurance expense for 1948.
400.00 representing the cost of insurance protection during 1949 and 1950.

Before the statements are prepared and the books are closed at the end of 1948, the following adjusting journal entry should be made to separate these two elements:

Unexpired Insurance	400.00	
Insurance		400.00
To transfer the unexpired insurance cost to a deferred expense account.		

This adjusting entry has the following effect:

It reduces the debit balance in the Insurance (expense) account to \$200.00, which is the amount of insurance expense incurred in 1948.
It sets up an Unexpired Insurance account with a balance of \$400.00, to be shown on the asset side of the balance sheet.

The unexpired insurance is a *prepaid expense.* It also is called a *deferred expense* or a *deferred charge*, because the charge to Profit and

Loss is deferred until the expense is incurred. It is proper to show it on the asset side of the balance sheet because it is the cost of a very valuable right to collect from an insurance company in the event of a fire loss in 1949 or 1950.

Adjusting, closing, and reversing entries. If an expense account is affected by a deferred expense, the closing procedure at the end of the period involves three entries: an adjusting entry, a closing entry, and a reversing entry.

Illustration. The debit in the following expense account shows the premium cost of a three-year fire insurance policy·

Insurance

Date				Debit	Date				Credit
1948 Jan	1			600 00					

(1) *Adjusting entry*

The following adjusting entry is made for the deferred expense

Dec 31	Unexpired Insurance	400 00	
	Insurance		400 00
	To transfer the unexpired insurance cost to a deferred expense account.		

After this entry is posted, the two accounts affected appear as follows

Insurance

Date				Debit	Date				Credit
1948 Jan.	1			600 00	*1948 Dec*	*31*	*Deferred*		*400 00*

The balance in this account now shows the insurance expense for 1948.

Unexpired Insurance

Date				Debit	Date				Credit
1948 Dec	*31*	*Deferred*		*400 00*					

This is an asset account.

(2) *Closing entry*

The Insurance account is closed to Profit and Loss by the following journal entry:

Dec 31	—Profit and Loss	200 00	
	Insurance		200 00
	To close.		

After the closing entry is posted, the expense account and the deferred expense account appear as follows:

Insurance

1948				600 00	1948				
Jan.	1				Dec.	31	Deferred		400 00
						31	To P. & L.		200 00
				600 00					600 00

Unexpired Insurance

1948									
Dec.	31	Deferred		400 00					

(3) *Reversing entry:*

After the books are closed, the following journal entry should be made, under date of January 1, 1949, to reverse the adjusting entry:

Jan. 1—Insurance. .	400.00	
Unexpired Insurance		400.00
To reverse the adjusting entry of December 31.		

After this entry is posted, the expense account and the deferred charge account appear as follows:

Insurance

1948				600 00	1948				
Jan.	1				Dec.	31	Deferred		400 00
						31	To P. & L.		200 00
				600 00					600 00
1949									
Jan.	*1*	*Deferred*		*400 00*					

Unexpired Insurance

1948					*1949*				
Dec.	31	Deferred		400 00	*Jan.*	*1*	*Reversal*		*400 00*

The adjusting entry is reversed so that the Insurance account will show the premium cost of insurance in force at the beginning of 1949.

Deferred Income

Nature of deferred income. The income *earned* during a period may be less than the amount *collected*. As an example, assume that a company owns a truck and that, on October 1, 1948, it entered into a contract with a store to make the store's deliveries for $100.00 a

month, collectible in advance, assume, also, that the company collected \$100 00 on October 1, November 1, December 1, and December 31 The collection on December 31 was received in advance for services to be rendered in January The \$400 00 credit balance in the Delivery Income account on December 31, 1948 consists of two elements

\$300 00 earned during 1948
100 00 which will not be earned until 1949

Before the statements are prepared and the books are closed at the end of 1948 the following adjusting journal entry should be made to separate these two elements

Delivery Income	100 00	
Deferred Delivery Income		100 00
To transfer the unearned income to a deferred income account		

This adjusting entry has the following effect

It reduces the credit balance in the Delivery Income account to \$300 00, the amount of income earned during 1948

It sets up a Deferred Delivery Income account with a credit balance of \$100 00, to be shown on the liability side of the balance sheet

The income collected in advance is called *deferred income* or a *deferred credit* because the credit to Profit and Loss is postponed until the income is earned by rendering the service It is proper to show it on the liability side of the balance sheet because, although there is no obligation payable in cash, there is an obligation to render a service during 1949

Adjusting, closing, and reversing entries If an income account is affected by a deferred credit, the closing procedure at the end of the period involves three entries an adjusting entry, a closing entry, and a reversing entry

Illustration The credit in the following account shows the total amount collected during 1948 for delivery services

Delivery Income

				1948	Total collected		400 00

(1) *Adjusting entry*

The adjusting entry on page 147 is made for the deferred income

Dec. 31—Delivery Income	100.00	
Deferred Delivery Income		100.00
To transfer the unearned income to a deferred income account.		

After this entry is posted, the two accounts affected appear as follows:

Delivery Income

1948				1948			
Dec.	*31*	*Deferred*	*100 00*			Total collected	400 00

The balance in this account now shows the delivery income earned during 1948.

Deferred Delivery Income

				1948			
				Dec	*31*	*Deferred*	*100 00*

The credit balance of this account should be shown on the liability side of the balance sheet.

(2) *Closing entry:*

The Delivery Income account is closed to Profit and Loss by the following closing entry:

Dec. 31—Delivery Income	300 00	
Profit and Loss		300.00
To close.		

After this entry is posted, the income account and the deferred credit account appear as follows:

Delivery Income

1948				1948			
Dec.	31	Deferred	100 00			*Total collected*	400 00
	31	*To P. & L.*	*300 00*				
			400 00				400 00

Deferred Delivery Income

				1948			
				Dec	31	Deferred	100 00

(3) *Reversing entry:*

After the books are closed, and under date of January 1, 1949, the journal entry shown on page 148 should be made, reversing the adjusting entry for the deferred income.

Jan 1—Deferred Delivery Income	100 00	
Delivery Income		100 00
To reverse the adjusting entry		

After this entry is posted the income account and the deferred credit account appear as follows

Delivery Income

1948				1948			
Dec	31	Deferred	100 00			Total collected	400 00
	31	To P & L	300 00				
			400 00				400 00
				1949			
				Jan	*1*	*Deferred*	*100 00*

Deferred Delivery Income

1949				1948			
Jan	*1*	*Reversal*	*100 00*	Dec	31	Deferred	100 00

The purpose of this reversing entry can be explained by assuming that the delivery contract continued through 1949 The January fee had already been collected, and the total collections during 1949 were $1 100 00 this amount was credited to the Delivery Income account, making the balance in that account at the end of the year $1 200 00 or the total income for 1949 as shown in the following account

Delivery Income

1948				1948			
Dec	31	Deferred	100 00			Total collected	400 00
	31	To *P & L*	*300 00*				
			400 00				400 00
				1949			
				Jan	1	Deferred	100 00
						Collected	1 100 00

Extended illustration To show the effect of adjustments for accrued and deferred items on the whole procedure of preparing working papers and statements it is desirable to give a somewhat extended illustration

Trial balance The illustration is based on a trial balance of the accounts of The Mason Company taken at the end of the year 1948 This trial balance appears in the working papers on pages 150 and 151

Adjustments Adjustments are to be made for the four accrued and deferred items discussed in the foregoing illustrations The adjusting entries appear on page 149

Office Salaries	30.00	
Accrued Salaries Payable		30.00
To record accrual.		
Accrued Interest Receivable	20.00	
Interest Income		20.00
To record accrual.		
Unexpired Insurance	400.00	
Insurance		400.00
To defer unexpired insurance.		
Delivery Income	100.00	
Deferred Delivery Income		100.00
To defer income collected in advance.		

Working papers. When adjusting journal entries are made for accrued and deferred items, the working papers should contain a pair of Adjustments columns in which to indicate the effect of these adjustments on the expense and income accounts, and also on the asset, liability, and deferred income accounts. Refer to the working papers on pages 150 and 151 and note how:

The adjustments are shown in the Adjustments columns.
The amounts of these adjustments are added to or deducted from the amounts shown in the Trial Balance columns, to determine the total or net amounts to be entered in the distribution columns at the right.

The four adjustments and their treatment in the working papers are discussed below:

(a) Adjustment for accrued office salaries.
The $30.00 debit to Office Salaries (expense) is entered in the debit adjustment column on the line for that account; this $30.00 is added to the $3,100.00 balance of the expense account, and the total is carried to the debit Profit and Loss column. (*Caution:* Do not carry out any balances to the Profit and Loss, Surplus, or Balance Sheet columns until *all* the adjustments have been entered in the working papers. Some accounts may be affected by more than one adjustment.)
The $30.00 credit to Accrued Salaries Payable (liability) is entered in the credit adjustment column on a line below the trial balance, since no such account appears in the trial balance. This $30.00 credit is carried, as a liability, to the Balance Sheet column.

(b) Adjustment for accrued interest on notes receivable.
The $20.00 credit to Interest Income is entered on the line for that account: this $20.00 is added to the $300.00 bal-

THE MASON COMPANY
Working Papers
For the Year Ended December 31, 1948

	Trial Balance		Adjustments		Profit and Loss Statement		Surplus Statement		Balance Sheet	
Cash	29,500								29,500	
Accounts Receivable	3,000								3,000	
Notes Receivable	6,000								6,000	
Inventory (December 31, 1947)	60,000				60,000					
Delivery Equipment	6,000								6,000	
Accounts Payable		11,000								11,000
Notes Payable		15,000								15,000
Capital Stock		50,000								50,000
Surplus (December 31, 1947)		7,700						7,700		
Sales		460,000				460,000				
Returned Sales and Allowances	1,000				1,000					
Purchases	360,000				360,000					
Returned Purchases and Allowances		1,500				1,500				
Freight In .	2,000				2,000					
Store Rent . .	5 000				5,000					
Advertising	25 000				25,000					
Salesmen's Salaries	28 000				28,000					
Delivery Expense	7,500				7,500					
Office Salaries	3,100		30(a)		3,130					
Office Expense	5,000				5,000					
Insurance	600			400(c)	200					
Delivery Income		400	100(d)			300				
Interest Income		300		20(b)		320				
Discount on Purchases		4,500				4,500				
Interest Expense	100				100					
Discount on Sales	3,600				3,600					
Dividends	5 000						5,000			
	550 400	550,400								
Totals forward			130	420	500 530	466 620	5 000	7,700	44 500	76,000

Working Papers—*Concluded*

	Trial Balance		Adjustments		Profit and Loss Statement		Surplus Statement		Balance Sheet	
Forward			130	120	500,530	166,620	5,000	7,700	11,500	76,000
Accrued Salaries Payable				30(a)						30
Accrued Interest Receivable			20(b)						20	
Unexpired Insurance			100(c)						100	
Deferred Delivery Income				100(d)						100
			550	550						
Inventory, December 31, 1918						15,000			15,000	
Net Income—To Surplus					11,090			11,090		
					511,620	511,620				
Surplus, December 31, 1918							13,790			13,790
							18,790	18,790	89,920	89,920

ance of the income account, and the total is carried to the credit Profit and Loss column

The $20 00 debit to Accrued Interest Receivable (asset) is entered on a line below the trial balance, and is carried, as an asset, to the Balance Sheet column

(c) Adjustment for unexpired insurance

The $400 00 credit to Insurance (expense) for the deferred expense is entered on the line for that account, the $400 00 is deducted from the $600 00 balance of the expense account and the remaining $200 00 (or expense applicable to 1948) is carried to the debit Profit and Loss column

The $400 00 debit to Unexpired Insurance (deferred expense) is entered on a line below the trial balance, and is carried as an asset, to the Balance Sheet column

(d) Adjustment for delivery income collected in advance

The $100 00 debit to Delivery Income, for income deferred, is entered on the line for that account the $100 00 deferred income is deducted from the $400 00 balance of the income account and the remaining $300 00 (or income applicable to 1948) is carried to the credit Profit and Loss column

The $100 00 credit to Deferred Delivery Income is entered on a line below the trial balance, and is carried to the Balance Sheet credit column

The offsetting debits and credits in the Adjustments columns of the working papers are indicated by letters in parentheses The adjustments in the working papers should always be cross referenced by letters in this manner

You should also note that if the adjusting entries include debits or credits to accounts which do not appear in the trial balance, the names of all such accounts are written in the working papers below the trial balance

Several adjustments of one account Sometimes it is necessary to make more than one adjustment affecting the same account To illustrate assume that the following adjustments of the Delivery Expense account are required

Accrued salary of truck driver $50 00
Deferred expense for gas oil and other delivery supplies on hand, $40 00
Deferred expense for prepaid garage rent $25 00

The procedure for dealing with these adjustments is illustrated below Note that the three adjustments of the Delivery Expense account are bracketed, and that the $7,485 00 carried to the Profit and Loss column is determined by applying the three adjustments

(e, f, and g) to the trial balance figure. Similarly, the two credits to Accrued Salaries Payable are bracketed to indicate that they apply to one account.

Portion of Working Papers

	Trial Balance		Adjustments		Profit and Loss Statement		Surplus State-		Balance Sheet	
Delivery Expense	7,500		50(e)	10(f) 25(g)	7,515					
Office Salaries	3,100		30(a)		3,130					
	550,400	550,400								
Accrued Salaries Payable				30(a) 50(e)						80
Delivery Supplies			10(f)						10	
Prepaid Garage Rent			25(g)						25	

Statements of profit and loss and surplus. In the statement of profit and loss on page 154 the amounts shown for Office Salaries, Interest Income, Insurance, and Delivery Income are the total or net amounts shown in the working papers on pages 150 and 151 after making the adjustments.

Classification in the balance sheet. The illustrative balance sheet on page 155 shows how the various items on the asset and liability sides may be grouped under side captions.

The principal balance sheet side captions (all of which, except Other Assets and Fixed Liabilities, are illustrated in the balance sheet on page 155) are:

On the Asset side:

Current Assets: Cash and other assets, such as accounts receivable and inventory, which will presumably be converted into cash in the near future through the regular operations of the business.

Fixed Assets: Property of a relatively permanent nature, such as land, buildings, furniture and fixtures, office equipment, and delivery equipment, used in the operations of the business, and not intended for sale.

Other Assets: Permanent investments in stocks and bonds, and any assets which do not fall within the other classifications.

Prepaid Expenses: The items shown under this caption are properly included on the asset side of the balance sheet because they represent the costs of future services or other benefits for which payment already has been made.

Exhibit C

THE MASON COMPANY
Statement of Profit and Loss
For the Year Ended December 31, 1948

Gross Sales			$460 000
Deduct Returned Sales and Allowances			1 000
Net Sales			$459 000
Deduct Cost of Goods Sold			
Inventory December 31 1947		$ 60 000	
Purchases	$360 000		
Deduct Returned Purchases and Allowances	1 500		
Net Purchases	$358,500		
Freight In	2 000		
Total		360 500	
Total Inventory and Purchases		$420 500	
Deduct Inventory December 31 1948		45 000	
Cost of Goods Sold			375 500
Gross Profit on Sales			$ 83 500
Deduct Selling Expenses			
Store Rent		$ 5 000	
Advertising		25 000	
Salesmen s Salaries		28 000	
Delivery Expense		7 500	
Total Selling Expenses			65 500
Net Profit on Sales			$ 18 000
Deduct General Expenses			
Office Salaries		$ 3 130	
Office Expense		5 000	
Insurance		200	
Total General Expenses			8 330
Net Profit on Operations			$ 9 670
Add Other Income			
Delivery Income		$ 300	
Interest Income		370	
Discount on Purchases		4 500	
Total Other Income			5 120
Net Profit on Operations and Other Income			$ 14 790
Deduct Other Expenses			
Interest Expense		$ 100	
Discount on Sales		3 600	
Total Other Expenses			3 700
Net Income—To Surplus			$ 11 090

Exhibit B

THE MASON COMPANY
Statement of Surplus
For the Year Ended December 31, 1948

Surplus December 31 1947	$ 7 700 00
Net Income for the Year—Exhibit C	11 090 00
Total	$18 790 00
Deduct Dividends	5 000 00
Surplus December 31 1948	$13 790 00

THE MASON COMPANY — Exhibit A

Balance Sheet

December 31, 1948

Assets

Current Assets:		
Cash	$20,500.00	
Accounts Receivable	3,000.00	
Notes Receivable	6,000.00	
Accrued Interest Receivable	20.00	
Inventory	45,000.00	
Total Current Assets		$83,520.00
Fixed Assets:		
Delivery Equipment		6,000.00
Prepaid Expense:		
Unexpired Insurance		400.00
		$89,920.00

Liabilities and Net Worth

Current Liabilities:		
Accounts Payable	$11,000.00	
Notes Payable	15,000.00	
Accrued Salaries Payable	30.00	
Total Current Liabilities		$26,030.00
Deferred Income:		
Deferred Delivery Income		100.00
Net Worth:		
Capital Stock	$50,000.00	
Surplus—Exhibit B	13,790.00	
Total Net Worth		63,790.00
		$89,920.00

The caption *Deferred Charges* is often used instead of *Prepaid Expenses*, but many accountants prefer the *Prepaid Expenses* caption for items representing current expense prepayments.

On the Liability side:

Current Liabilities: Accounts and notes payable, and any other debts due in the near future—say, within a year.

Fixed Liabilities: Debts not due in the near future.

Deferred Income: Any income collected in advance. Deferred income is properly shown on the liability side of the balance sheet because (although deferred income is not a debt) there is an obligation to render a future service in return for the collection already received.

Net Worth: The sum of capital stock and surplus.

CHAPTER 12

Valuation Reserves for Bad Debts and Depreciation

Principles of valuation One of the fundamental principles of accounting is known as the *cost principle,* which may be stated somewhat as follows charges to asset and expense accounts should generally be made on the basis of cost—or, in other words, on the basis of actual expenditures An expenditure may be defined as a disbursement of cash, or the incurring of an obligation to make a future disbursement

The cost principle obviously would be violated if assets were carried in the accounts and shown in the balance sheet at valuations in excess of cost Assume, for instance, that a company operating a wood-working establishment built a table for its own use at a cost of \$50 00, and that the table would have cost \$75 00 if purchased from someone else The table should be charged to a fixed asset account on the company's books at \$50 00 To charge it to the fixed asset account at \$75 00 would involve taking a "profit" of \$25 00, which would be illogical and a violation of good accounting, because one cannot make a profit by doing work for himself Accountants call a 'profit' of this sort an *unrealized profit,* which is really no profit at all The \$25 00 is merely a saving of cost

A failure to recognize all elements of cost is also a violation of the cost principle For instance, assume that a company purchased a machine for \$500 00 and paid transportation charges of \$50 00 The transportation charges are a part of the cost of the machine, and should be charged to the fixed asset account To charge them to an expense account would understate the cost of the machine, overstate the expenses, and understate the net income

There are some assets to which the cost principle does not apply Accounts receivable are an illustration If a merchant buys goods for \$100 00 and sells them on account for \$150 00, the account receivable cannot be said to have cost the merchant \$150 00, because of the profit element Accounts receivable should be valued, not on a cost basis, but at the amount which presumably will be collected, after an allowance for estimated bad debts

The cost principle does apply to fixed assets, but this does not mean that fixed assets should forever be valued in the balance sheet at original cost Fixed asset costs usually expire A fixed asset usually is subject to depreciation, and its useful life eventually comes to an end The cost of a fixed asset which is subject to depreciation

should be charged to expense gradually over the useful life of the asset; the portion of the cost which has been so charged to expense is "expired cost." The asset should be valued in the balance sheet at original cost minus expired cost.

The remainder of this chapter contains a discussion of the proper bases of valuation of accounts receivable and fixed assets, and the accounting procedures applied to reflect these valuations in the accounts.

Provision for bad debts. At the end of 1948 (the first year of operations), a company prepared the following statements:

THE *X Y* COMPANY
Statement of Profit and Loss
For the Year Ended December 31, 1948

Sales ...	$100,000.00
Deduct Cost of Goods Sold	80,000.00
Gross Profit on Sales	$ 20,000.00
Deduct Expenses..	12,000.00
Net Profit....	$ 8,000.00

THE X *Y* COMPANY
Balance Sheet
December 31, 1948

Assets		Liabilities and Net Worth		
Cash....	$ 6,000	Accounts Payable		$ 5,000
Accounts Receivable	13,000	Net Worth:		
Inventory..	15,000	Capital Stock	$25,000	
Delivery Equipment	4,000	Surplus..	8,000	33,000
	$38,000			$38,000

Both the statement of profit and loss and the balance sheet are incorrect because no consideration has been given to the probable loss from bad debts.

The balance sheet shows that there are $13,000.00 of accounts receivable on the books. But it is a rare thing for merchants to collect all their accounts receivable: some losses are almost certain to occur. Therefore, if the balance sheet is to state correctly the financial condition of the company, it should show the *net* amount which probably will be collected from the accounts receivable: this will be less than $13,000.00.

Moreover, the statement of profit and loss for each period should include all losses and expenses applicable to the period. Bad debt losses should therefore be deducted in the statement of profit and loss for the period in which the losses are incurred. In what period are they incurred? Bad debt losses result from selling merchandise to customers who do not pay their accounts; such losses are there-

fore incurred in the period in which the sales are made If goods were sold in 1948 to customers whose accounts were found in 1949 to be worthless, the loss was *incurred* in 1948 because nothing of value was received for the merchandise The loss was not *incurred* in 1949 it was merely *discovered* in that year

Thus it is evident that both the balance sheet and the statement of profit and loss will be incorrect unless provision is made for the probable losses on accounts receivable

If it is estimated that only $12,000 00 will be collected from the receivables totaling $13,000 00, the bad debt losses are estimated at $1,000 00 and the following journal entry should be made at the end of 1948

Bad Debts	1 000 00	
Reserve for Bad Debts		1 000 00
To provide for the estimated losses on uncollectible accounts		

Nature of Bad Debts account The Bad Debts account, which was debited in the foregoing journal entry, is an expense account, its balance should be shown as an expense in the profit and loss statement (as illustrated below), and the account should be closed to Profit and Loss

THE *X Y* COMPANY
Statement of Profit and Loss
For the Year Ended December 31, 1948

Sales		$100 000 00
Deduct Cost of Goods Sold		80 000 00
Gross Profit on Sales		$ 20 000 00
Deduct		
Expenses	$12 000 00	
Bad Debts	1 000 00	13 000 00
Net Profit		$ 7 000 00

In a statement in which the expenses are classified under selling and general captions, bad debts may be shown in the general expense section

Nature of bad debt reserve. Increases in assets are recorded by debits, decreases are recorded by credits The estimated decrease in the value of the accounts receivable cannot be credited to the debtors' accounts because, at the time the estimate is made, the particular accounts which will finally prove worthless are unknown Since we cannot credit any particular debtors' accounts, we credit the reserve, which thus stands as a sort of blanket deduction from all of the accounts receivable In other words, the total of the debit

balances in the debtors' accounts minus the credit balance in the Reserve for Bad Debts represents the estimated net value of the accounts receivable asset. Therefore, in the balance sheet, the credit balance in the Reserve for Bad Debts should be deducted from the total of the debit balances in the customers' accounts.

THE *X Y* COMPANY
Balance Sheet
December 31, 1948

Assets			Liabilities and Net Worth		
Cash.		$ 6,000	Accounts Payable .		$ 5,000
Accounts Receivable. . .	$13,000				
Deduct Reserve for			Net Worth:		
Bad Debts.	1,000	12,000	Capital Stock . .	$25,000	
Inventory.		15,000	Surplus.	7,000	32,000
Delivery Equipment. . .		4,000			
		$37,000			$37,000

The Reserve for Bad Debts is called a *valuation* account, or valuation reserve, because its credit balance must be deducted from the total of the debit balances in the debtors' accounts to determine the estimated net value of the receivables. Valuation reserves are sometimes called *contra* accounts or *offset* accounts.

The nature of the reserve might be more clearly understood if some title were used such as Estimated Deduction for Bad Debts. The word *Reserve* is standard accounting terminology, and means the same thing.

Writing off bad accounts. After the adjusting journal entry shown on page 158 is made, the ledger contains the following account balances:

Accounts Receivable	$13,000.00	
Reserve for Bad Debts		$1,000.00

The accounts receivable are carried at a net valuation of $12,000.00.

Let us now assume that an account with P. K. Lane, with a balance of $75.00, is determined to be uncollectible: it should be written off by the following journal entry:

Reserve for Bad Debts.	75.00	
P. K. Lane		75.00
To write off the uncollectible account.		

It should be noted that the loss is charged to the reserve and not to the Bad Debts (expense) account. If we debited the Bad Debts account with *estimated* losses when the reserve is set up and later with *ascertained* losses, a double charge to expense would result.

The journal entry writing off Lane's account transfers a portion of the credit balance of the reserve (which was an offset against the debit balances of *all* the accounts receivable) to the credit of Lane's account as a direct offset against the debit balance in his account This direct credit eliminates Lane's account from the accounts receivable

After Lane's account is written off, the ledger contains the following balances

Accounts Receivable	$12 925 00	
Reserve for Bad Debts		$925 00

The accounts receivable are still carried at a net valuation of $12,000 00 No change has occurred except that one receivable and an equal amount of the reserve have been eliminated

Methods of estimating bad debt provisions The amount to be debited to Bad Debts and credited to the Reserve for Bad Debts at the end of a period is frequently computed as a per cent of the net sales for the period For example, assume that the trial balance on December 31 contains the following balances

Accounts Receivable	$20 000 00	
Reserve for Bad Debts		$ 315 00
Sales		215 000 00
Returned Sales and Allowances	1 500 00	

Assume, further, that the reserve is to be credited with a provision for bad debts equal to ½ of 1% of the net sales for the year The provision is computed as follows

Sales	$215 000 00
Deduct returned sales and allowances	1 500 00
Net sales	$213 500 00

Reserve provision = ½ of 1% of $213 500 00 = $1 067 50

This amount is debited to Bad Debts and credited to the reserve

The total reserve is now $315 00 + $1,067 50, or $1,382 50 and the accounts receivable will be shown in the balance sheet as follows

Accounts Receivable	$20 000 00	
Less Reserve for Bad Debts	1 382 50	$18 617 50

The amount to be added to the reserve is also sometimes computed by giving consideration to the probable collectibility of each debtor s account, and thereby estimating the total probable reserve requirement The Bad Debts account is then debited and the reserve is credited with an amount sufficient to increase the reserve to the required balance For example, suppose that the management reviewed the accounts receivable totaling $20,000 00 (see pre

ceding illustration) and decided that a $1,500.00 reserve might be required. The provision to be made at the end of the year would be computed as follows:

Total reserve required	$1,500.00
Present balance in the reserve .	315.00
Amount to be debited to Bad Debts and credited to the reserve	$1,185.00

The accounts receivable would appear in the balance sheet as follows:

Accounts Receivable .	$20,000.00	
Less Reserve for Bad Debts.	1,500.00	$18,500.00

Provision for depreciation. Because fixed assets do not last forever, the cost of a fixed asset is a sort of prepaid expense. In other words, if a fixed asset will have no value at the end of five years of use, its cost is an expense of the five-year period. A portion of the cost should be charged as an expense of each year. For instance, if a fixed asset cost $4,000.00 and has an estimated life of five years, one fifth of the cost, or $800.00, may be charged as an expense of each year. The portion of the cost of a fixed asset which is regarded as having expired is called *depreciation.*

The profit and loss statement and the balance sheet on page 157 are incorrect because no provision has been made for depreciation. The balance sheet shows that the company owns delivery equipment that is carried in the accounts at $4,000.00, which presumably is cost. If the depreciation for the year is estimated at $800.00, the profit and loss statement should include depreciation expense of that amount, and the balance sheet valuation of the asset should be reduced by $800.00, the expired cost. Therefore, the following journal entry should be made:

Depreciation of Delivery Equipment .. .	800.00	
Reserve for Depreciation—Delivery Equipment		800.00
To provide for depreciation of delivery equipment for the year on the basis of an estimated life of five years.		

After this journal entry is posted, the accounts appear as follows:

Delivery Equipment	
4,000.00	

Depreciation of Delivery Equipment	
800.00	

Reserve for Depreciation—Delivery Equipment	
	800.00

Nature of the Depreciation account. The Depreciation of Delivery Equipment account is an expense account, it should be closed to the Profit and Loss account, and its debit balance should be shown as an expense in the statement of profit and loss

THE X Y COMPANY
Statement of Profit and Loss
For the Year Ended December 31 1948

Sales		$100 000 00
Deduct Cost of Goods Sold		80 000 00
Gross Profit on Sales		$ 20 000 00
Deduct		
Expenses	$12 000 00	
Bad Debts	1 000 00	
Depreciation—Delivery Equipment	800 00	13 800 00
Net Profit		$ 6 200 00

In a statement of profit and loss in which the expenses are classified under selling and general captions, the classification of depreciation will depend upon the department in which the depreciating asset is used. The depreciation of assets used in selling (such as the store building store equipment, and delivery equipment) should be shown under the selling expense caption depreciation of assets used in the general administration of the business (such as office equipment) should be shown under the general expense caption

Nature of the Reserve for Depreciation The credit balance in the Reserve for Depreciation is an offset against the debit balance in the asset account in other words the debit balance in the asset account minus the credit balance in the reserve account represents the depreciated book value of the fixed asset Therefore, in the balance sheet, the credit balance in the Reserve for Depreciation should be deducted from the debit balance in the Delivery Equipment account The remainder is the depreciated book value of the delivery equipment

THE X Y COMPANY
Balance Sheet
December 31, 1948

Assets			Liabilities and Net Worth		
Cash		$ 6 000	Accounts Payable		$ 5 000
Accounts Receivable	$13 000				
Deduct Reserve for Bad Debts	1 000	12 000	Net Worth		
			Capital Stock	$25 000	
Inventory		15 000	Surplus	6 200	31,200
Delivery Equipment	$ 4 000				
Deduct Reserve for Depreciation	800	3 200			
		$36 200			$36 200

The depreciation reserve, like the bad debt reserve, is called a valuation account because its credit balance must be deducted from the debit balance of the fixed asset account to determine the depreciated book value of the property. The reserve is therefore virtually a part of the asset account; or perhaps it would be more exact to state that the asset account and the reserve account together contain the record of the increases and the decreases in the book value of the asset.

Depreciation entries for a series of years. To emphasize the fact that the Depreciation (expense) account is closed to Profit and Loss at the end of each period whereas the balance in the reserve account accumulates, accounts are presented below for three years:

Delivery Equipment

1948 Jan. 1	4,000		

Depreciation of Delivery Equipment

1948 Dec. 31	800	1948 Dec. 31 To P. & L.	800
1949 Dec. 31	800	1949 Dec. 31 To P. & L.	800
1950 Dec. 31	800	1950 Dec. 31 To P. & L.	800

Reserve for Depreciation of Delivery Equipment

		1948 Dec. 31	800
		1949 Dec. 31	800
		1950 Dec. 31	800

Reason for use of a reserve. The decrease in the book value of a fixed asset resulting from depreciation *might be* recorded in the asset account, together with decreases resulting from disposals of assets. But this procedure would make it difficult to obtain desirable information.

To illustrate, let us assume that a fixed asset account has been credited with depreciation and with asset disposals, and appears as follows:

Delivery Equipment

1948 Jan.	1	2 heavy trucks	6,000.00	1948 Dec.	31	Depreciation	1,200.00
1949 Jan.	10	3 light trucks	4,500.00	1949 Mar.	8	Cost of 1 light truck sold	1,500.00

The $7,800.00 balance in the account represents the depreciated book value of the two heavy trucks and the two light trucks still

owned But to ascertain the *cost* of the trucks still owned it is necessary to determine the total credits for depreciation and the total credits for disposals, and to deduct from the total debits only those credits which record disposals, thus

Total debits—representing cost of trucks acquired	$10 500 00
Deduct the credit for the cost of the truck sold	1 500 00
Cost of trucks still owned	$ 9 000 00

Considerable effort might be required to separate the two classes of credits Therefore, it is better to separate them in the first place, by crediting the asset account with decreases resulting from disposals of assets, and by crediting a reserve for depreciation with decreases in book value representing depreciation The accounts will then appear as follows

Delivery Equipment

1948 Jan	1	2 heavy trucks		6 000 00	1949 Ma	8	Cost of 1 light truck sold		1 500 00
1949 Jan	10	3 light trucks		4 500 00					

Reserve for Depreciation of Delivery Equipment

					1948 Dec	31			1 200 00

The cost of the trucks still owned is now readily determinable, it is $9,000 00, as shown by the debit balance of the asset account The credit balance in the reserve represents the recorded depreciation of the assets still owned

Writing off fully depreciated assets In the illustration of the X Y Company, which owned delivery equipment costing $4,000 00 and on which depreciation of $800 00 was provided annually, the delivery equipment would be fully depreciated at the end of five years, as shown by the following accounts

Delivery Equipment

1948 Jan	1	Cost		4 000 00					

Reserve for Depreciation of Delivery Equipment

					1948 Dec	31			800 00
					1949 Dec	31			800 00
					1950 Dec	31			800 00
					1951 Dec	31			800 00
					1952 Dec	31			800 00

Since the credits in the reserve (representing portions of cost charged to expense) are equal to the cost, the equipment is carried in the accounts at no value. It may be written off by the following entry:

Reserve for Depreciation of Delivery Equipment	4,000.00	
Delivery Equipment		4,000.00
To write off the fully depreciated asset.		

The posting of this journal entry would result in closing both the asset account and the related reserve for depreciation.

Some accountants prefer to carry the asset account and the offsetting reserve until the asset is disposed of.

Writing down a fixed asset account. Depreciation sometimes is credited directly to the fixed asset account instead of to a reserve for depreciation. This may be done if the amount of depreciation is determined by taking an inventory of the fixed assets instead of applying an estimated depreciation rate. It is a procedure suitable for use in connection with small tools or other fixed assets consisting of a large number of units of relatively small value which wear out rapidly, or which may be lost or stolen.

To illustrate, let us assume that, at the end of the year, the Small Tools account contains charges totaling $6,500.00, thus:

Small Tools

	Total charges for tools purchased during the year		6,500.00				

At the end of the year, an inventory of the small tools is taken, and their depreciated value is found to be $5,000.00 The following journal entry is made to record the depreciation:

Dec. 31—Depreciation—Small Tools	1,500.00	
Small Tools		1,500.00
To reduce the balance of the Small Tools account to the depreciated value of the tools on hand, per inventory.		

After this entry is posted, the two accounts appear as follows:

Small Tools

	Total charges for tools purchased during the year		6,500.00	Dec. 31	Depreciation		1,500.00

Depreciation—Small Tools

Dec. 31			1,500.00				

This procedure is called *writing down the asset.*

Showing depreciated fixed assets in the balance sheet It formerly was the custom to use the expression *depreciated value* in balance sheets as a title for the difference between the cost of a fixed asset and the depreciation provided to date On the assumption that a depreciation reserve was provided for delivery equipment and that the Small Tools account was written down to an inventory valuation, a customary balance sheet showing was

Fixed Assets			
Delivery Equipment	$10 000 00		
Deduct Reserve for Depreciation	2 000 00		
Depreciated Value		$8 000 00	
Small Tools—Depreciated Value		5 000 00	
Total Fixed Assets—Depreciated Value			$13 000 00

It is now coming to be more clearly recognized that depreciation accounting is not a procedure for determining value (such as secondhand value or realizable value) but is merely a procedure for charging operations with the cost of a fixed asset during its estimated useful life therefore many accountants believe that the use of the expression *depreciated value* should be discontinued since the term is inappropriate and may be misleading The use of the term may be avoided thus

Fixed Assets			
Delivery Equipment	$10 000 00		
Deduct Reserve for Depreciation	2 000 00	$8 000 00	
Small Tools		5 000 00	$13 000 00

or by substituting some other term thus

Fixed Assets			
Delivery Equipment	$10 000 00		
Deduct Reserve for Depreciation	2 000 00		
Cost Less Depreciation		$8 000 00	
Small Tools—Cost Less Depreciation		5 000 00	$13 000 00

Net book values of receivables and fixed assets The debit balances in the accounts receivable represent the gross book value of the receivables the gross book value minus the credit balance in the reserve for bad debts is the net book value

Similarly, the debit balance in a fixed asset account represents the gross book value of the asset and the gross book value minus the credit balance in the related reserve for depreciation is the net book value of the asset

The net book value of the accounts receivable is supposed to be the amount which the receivables are really worth If the reserve for bad debts is correctly estimated, the total of the receivables

minus the reserve is the amount which will be collected. However, it usually is impossible to determine the amount of the required reserve with absolute accuracy; therefore, the net book value of the receivables represents their estimated realizable value.

The net book value of a fixed asset is not even supposed to represent the amount which could be obtained for it. The provisions for depreciation are merely intended to charge the cost of the asset to expense over the years of useful life of the asset. The credit balance in a reserve for depreciation represents the portion of the cost which has been charged to expense. The net book value of a fixed asset represents the cost of the asset minus estimated depreciation; it does not purport to represent the market, or realizable, value.

Extended illustration. On the following pages we shall again illustrate the procedure of making working papers, adjusting and closing entries, and statements; adjustments will be made for accrued and deferred items, and for bad debts and depreciation.

First step. The trial balance on page 168 is entered in the working papers on page 169.

Second step. Adjusting journal entries are prepared for the accrued and deferred items, and for bad debts and depreciation.

Deferred and accrued items:

(a) One of the charges to the Advertising account was for the cost of catalogues printed during the year. At the end of the year there were catalogues on hand which cost $375.00. The following adjusting entry is made:

Catalogues. .	375.00	
Advertising		375.00
To record the prepaid expense of catalogues on hand.		

(b) The unexpired insurance at the end of the year was $300.00: the adjusting entry is:

Unexpired Insurance . .	300.00	
Insurance. .		300.00
Adjustment for unexpired insurance.		

(c) On November 1, 1948, a part of the store building was rented for $200.00 per month, and the rent for six months was collected in advance. As of December 31, rent for four months had been collected in advance, and the following entry is made:

Rent Income. . .	800.00	
Rent Collected in Advance		800.00
Rent income deferred.		

THE MONTGOMERY COMPANY
Trial Balance
December 31, 1948

Cash ..	5,000 00	
Accounts Receivable	25,000 00	
Reserve for Bad Debts		800 00
Inventory (December 31, 1947)	35,000 00	
Land	10,000 00	
Store Building	40,000 00	
Reserve for Depreciation—Store Building		8,000 00
Store Fixtures	4,000 00	
Reserve for Depreciation—Store Fixtures		1,200 00
Delivery Equipment	3,000 00	
Reserve for Depreciation—Delivery Equipment		900 00
Office Equipment	2,000 00	
Reserve for Depreciation—Office Equipment		400 00
Accounts Payable		15,000 00
Mortgage on Real Estate		25,000 00
Capital Stock .		50,000 00
Surplus		21,800 00
Sales		200,000 00
Returned Sales and Allowances	500 00	
Purchases	170,000 00	
Returned Purchases and Allowances		1,200 00
Salesmen's Salaries	9,000 00	
Advertising	5,250 00	
Delivery Expense	2,150 00	
Miscellaneous Selling Expense	800 00	
Insurance	700 00	
Taxes	450 00	
Office Salaries	3,500 00	
Office Expense	2,000 00	
Delivery Income		500 00
Rent Income		1,200 00
Discount on Purchases		1,300 00
Interest Expense	1,200 00	
Discount on Sales	1,750 00	
Dividends	9,000 00	
	330 300 00	330,300 00

(d) The company makes deliveries for another store at a rate of $100 00 per month. The delivery income for December had not been collected

Delivery Income Receivable	100 00	
Delivery Income		100 00
Accrued income receivable		

(e) Accrued interest on the mortgage payable was $300 00

Interest Expense	300 00	
Accrued Interest Payable		300 00
Accrued interest on mortgage		

(Adjusting entries are concluded on page 170)

Working Papers
Year Ended December 31, 1948

	Trial Balance		Adjustments		Profit and Loss Statement		Surplus Statement		Balance Sheet	
Cash	5,000 00								5,000 00	
Accounts Receivable	25,000 00								25,000 00	
Reserve for Bad Debts		800 00		700 00(f)						1,500 00
Inventory (December 31, 1947)	35,000 00				35,000 00					
Land	10,000 00								10,000 00	
Store Building	10,000 00								10,000 00	
Reserve for Depreciation—Store Building		8,000 00		2,000 00(g)						10,000 00
Store Fixtures	1,000 00								1,000 00	
Reserve for Depreciation—Store Fixtures		1,200 00		300 00(h)						1,500 00
Delivery Equipment	3,000 00								3,000 00	
Reserve for Depreciation—Delivery Equipment		900 00		600 00(i)						1,500 00
Office Equipment	2,000 00								2,000 00	
Reserve for Depreciation—Office Equipment		400 00		150 00(j)						550 00
Accounts Payable		15,000 00								15,000 00
Mortgage on Real Estate		25,000 00								25,000 00
Capital Stock		50,000 00								50,000 00
Surplus		21,800 00						21,800 00		
Sales		200,000 00				200,000 00				
Returned Sales and Allowances	500 00				500 00					
Purchases	170,000 00				170,000 00					
Returned Purchases and Allowances		1,200 00				1,200 00				
Salesmen's Salaries	9,000 00				9,000 00					
Advertising	5,250 00			375 00(a)	1,575 00					
Delivery Expense	2,150 00				2,150 00					
Miscellaneous Selling Expense	800 00				800 00					
Insurance	700 00			300 00(b)	400 00					
Taxes	170 00				170 00					
Office Salaries	3,700 00				3,700 00					
Office Expense	2,000 00				2,000 00					
Delivery Income		500 00		100 00(d)		600 00				
Rent Income		1,200 00	800 00(c)			400 00				
Discount on Purchases		1,500 00				1,500 00				
Interest Expense	1,200 00		300 00(e)		1,500 00					
Discount on Sales	1,750 00				1,750 00					
Dividends	9,000 00						9,000.00			
	[illegible]	[illegible]								
Catalogues			375 00(a)						375 00	
Unexpired Insurance			300 00(b)						300 00	
Rent Collected in Advance				800 00(c)						800 00
Delivery Income Receivable			100 00(d)						100 00	
Accrued Interest Payable				300 00(e)						300 00
Bad Debts			700 00(f)		700 00					
Depreciation—Store Building			2,000 00(g)		2,000 00					
Depreciation—Store Fixtures			300 00(h)		300 00					
Depreciation—Delivery Equipment			600 00(i)		600 00					
Depreciation—Office Equipment			150 00(j)		150.00					
			5,625 00	5,625 00						
Inventory, December 31, 1948						16,500 00			16,500 00	
Net Income—To Surplus					11,325 00			11,325 00		
					270,000 00	270,000 00				
Surplus, December 31, 1948							20,125 00			20,125 00
							29,125 00	29,125 00	136,275 00	136,275 00

Bad debt reserve

(f) An examination of the accounts receivable indicated that a reserve of $1,500 00 was required

Bad Debts	700 00	
Reserve for Bad Debts		700 00
To increase the reserve for bad debts to $1 500 00		

Provisions for depreciation—computed as indicated in the journal entries

(g)	Depreciation—Store Building	2 000 00	
	Reserve for Depreciation—Store Building		2 000 00
	To provide depreciation at 5% of $40 000 00 cost		
(h)	Depreciation—Store Fixtures	300 00	
	Reserve for Depreciation—Store Fixtures		300 00
	To provide depreciation at 7½% of $4 000 00 cost		
(i)	Depreciation—Delivery Equipment	600 00	
	Reserve for Depreciation—Delivery Equipment		600 00
	To provide depreciation at 20% of $3 000 00 cost		
(j)	Depreciation—Office Equipment	150 00	
	Reserve for Depreciation—Office Equipment		150 00
	To provide depreciation at 7½% of $2 000 00 cost		

Third step The working papers (page 169) are completed by applying the adjusting journal entries and extending the adjusted balances The inventory at the end of the year was valued at $46,500 00

When there are many adjustments, some accountants include in the working papers a column headed Trial Balance After Adjustment, in which are shown all account balances after applying the adjusting journal entries Working papers with such columns are illustrated on page 171

Fourth step The statements are prepared from the figures shown in the Profit and Loss, Surplus, and Balance Sheet columns of the working papers

The statement of profit and loss on page 172 contains charges for bad debts and for depreciation Note that the charge for bad debts is shown as a general expense the charges for depreciation of store building, store fixtures, and delivery equipment are shown as selling expenses because these assets are used in selling and delivering merchandise, the depreciation of office equipment is shown as a general expense

THE MONTGOMERY COMPANY
Working Papers
Year Ended December 31, 1948

	Trial Balance		Adjustments		Trial Balance After Adjustment		Profit and Loss Statement		Surplus Statement		Balance Sheet	
Cash	5,000 00				5,000 00						5,000 00	
Accounts Receivable	25,000 00				25,000 00						25,000 00	
Reserve for Bad Debts		800 00		700 00(f)		1,500 00						1,500 00
Inventory (December 31, 1947)	35,000 00				35,000 00		35,000.00					
Land	10,000 00				10,000 00						10,000 00	
Store Building	10,000 00				10,000 00						10,000 00	
Reserve for Depreciation—Store Building		8,000 00		2,000 00(g)		10,000 00						10,000 00
Store Fixtures	1,000 00				1,000 00						1,000 00	
Reserve for Depreciation—Store Fixtures		1,200 00		300 00(h)		1,500 00						1,500.00
Delivery Equipment	3,000 00				3,000 00						3,000 00	
Reserve for Depreciation—Delivery Equipment		900 00		600 00(i)		1,500 00						1,500 00
Office Equipment	2,000 00				2,000 00						2,000 00	
Reserve for Depreciation—Office Equipment		400 00		150 00(j)		550 00						550.00
Accounts Payable		15,000 00				15,000 00						15,000 00
Mortgage on Real Estate		25,000.00				25,000 00						25,000 00
Capital Stock		50,000 00				50,000 00						50,000 00
Surplus		21,800 00				21,800 00				21,800.00		
Sales		200,000.00				200,000 00		200,000.00				
Returned Sales and Allowances	500 00				500 00		500 00					
Purchases	170,000 00				170,000 00		170,000 00					
Returned Purchases and Allowances		1,200 00				1,200 00		1,200.00				
Salesmen's Salaries	9,000 00				9,000 00		9,000 00					
Advertising	5,250 00			375 00(a)	4,875 00		4,875 00					
Delivery Expense	2,150 00				2,150 00		2,150 00					
Miscellaneous Selling Expense	800 00				800 00		800 00					
Insurance	700 00			300 00(b)	400 00		400 00					
Taxes	150 00				150 00		150 00					
Office Salaries	3,500 00				3,500 00		3,500 00					
Office Expense	2,000 00				2,000 00		2,000 00					
Delivery Income		500 00		100 00(d)		600 00		600 00				
Rent Income		1,200 00	800 00(c)			400 00		400 00				
Discount on Purchases		1,300 00				1,300 00		1,300 00				
Interest Expense	1,200 00		300 00(e)		1,500 00		1,500 00					
Discount on Sales	1,750 00				1,750 00		1,750 00					
Dividends	9,000 00				9,000 00				9,000 00			
	330,300 00	330,300 00										
Catalogues			375 00(a)		375 00						375 00	
Unexpired Insurance			300 00(b)		300 00						300 00	
Rent Collected in Advance				800 00(c)		800 00						800 00
Delivery Income Receivable			100 00(d)		100 00						100 00	
Accrued Interest Payable				300 00(e)		300 00						300 00
Bad Debts			700 00(f)		700 00		700 00					
Depreciation—Store Building			2,000 00(g)		2,000 00		2,000 00					
Depreciation—Store Fixtures			300 00(h)		300 00		300 00					
Depreciation—Delivery Equipment			600 00(i)		600 00		600 00					
Depreciation—Office Equipment			150 00(j)		150 00		150 00					
			5,625 00	5,625 00	311,150 00	311,150 00						
Inventory, December 31, 1948								10,500 00			10,500 00	
Net Income—To Surplus							11,325 00			11,325 00		
							250,000 00	250,000 00				
Surplus, December 31, 1948									30,125 00			30,125 00
									39,125 00	39,125 00	130,275 00	130,275 00

THE MONTGOMERY COMPANY — Exhibit C

Statement of Profit and Loss

For the Year Ended December 31, 1948

Gross Sales			$200,000 00
Deduct Returned Sales and Allowances			500 00
Net Sales			$199,500 00
Deduct Cost of Goods Sold			
Inventory, December 31, 1947		$ 35,000 00	
Purchases	$170 000 00		
Deduct Returned Purchases and Allowances	1 200 00	168,800 00	
Total Inventory and Purchases		$203,800 00	
Deduct Inventory, December 31, 1948		46 500 00	157,300 00
Gross Profit on Sales			$ 42,200 00
Deduct Selling Expenses			
Salesmen s Salaries		$ 9,000 00	
Advertising		4,875 00	
Delivery Expense		2,150 00	
Miscellaneous Selling Expense		800 00	
Depreciation			
Store Building	$ 2,000 00		
Store Fixtures	300 00		
Delivery Equipment	600 00	2 900 00	19,725 00
Net Profit on Sales			$ 22,475 00
Deduct General Expenses			
Insurance		$ 400 00	
Taxes		450 00	
Office Salaries		3 500 00	
Office Expense		2 000 00	
Depreciation—Office Equipment		150 00	
Bad Debts		700 00	7,200 00
Net Profit on Operations			$ 15,275 00
Add Other Income			
Delivery Income		$ 600 00	
Rent Income		400 00	
Discount on Purchases		1 300 00	2 300 00
Net Profit on Operations and Other Income			$ 17,575 00
Deduct Other Expenses			
Interest Expense		$ 1,500 00	
Discount on Sales		1,750 00	3 250 00
Net Income			$ 14 325 00

THE MONTGOMERY COMPANY — Exhibit B

Statement of Surplus

For the Year Ended December 31, 1948

Surplus, December 31, 1947	$24 800 00
Add Net Income, per Exhibit C	14 325 00
Total	$39,125 00
Deduct Dividends	9 000 00
Surplus, December 31, 1948	$30 125 00

In the balance sheet on page 173, observe especially the method of deducting the balances of the reserves from the related asset account balances, to show the net book values of the assets.

THE MONTGOMERY COMPANY — Exhibit A

Balance Sheet

December 31, 1948

Assets

Current Assets:			
Cash		$ 5,000.00	
Accounts Receivable	$25,000.00		
Deduct Reserve for Bad Debts	1,500.00	23,500.00	
Delivery Income Receivable		100.00	
Inventory		46,500.00	
Total Current Assets			$ 75,100.00
Fixed Assets:			
Land		$10,000.00	
Store Building	$40,000.00		
Deduct Reserve for Depreciation	10,000.00		
Cost Less Depreciation		30,000.00	
Store Fixtures	$ 4,000.00		
Deduct Reserve for Depreciation	1,500.00		
Cost Less Depreciation		2,500.00	
Delivery Equipment	$ 3,000.00		
Deduct Reserve for Depreciation	1,500.00		
Cost Less Depreciation		1,500.00	
Office Equipment	$ 2,000.00		
Deduct Reserve for Depreciation	550.00		
Cost Less Depreciation		1,450.00	
Total Fixed Assets—Cost Less Depreciation			45,450.00
Prepaid Expenses:			
Catalogues		$ 375.00	
Unexpired Insurance		300.00	
Total Prepaid Expenses			675.00
			$121,225.00

Liabilities and Net Worth

Current Liabilities:			
Accounts Payable		$15,000.00	
Accrued Interest on Mortgage		300.00	
Total Current Liabilities			$ 15,300.00
Fixed Liabilities:			
Mortgage on Real Estate			25,000.00
Deferred Income:			
Rent Collected in Advance			800.00
Net Worth:			
Capital Stock		$50,000.00	
Surplus, per Exhibit B		30,125.00	
Total Net Worth			80,125.00
			$121,225.00

No depreciation reserve has been provided for the land. Land used as a building site is a fixed asset which does not depreciate.

Fifth step. The adjusting journal entries are posted, and the following closing journal entries are made and posted to the ledger accounts:

Sales	200,000 00	
Profit and Loss		200,000 00
To close the Sales account		
Profit and Loss	500 00	
Returned Sales and Allowances		500 00
To close the Returned Sales and Allowances account		
Profit and Loss	35,000 00	
Inventory		35,000 00
To charge Profit and Loss with the inventory at the beginning of the period.		
Profit and Loss	170,000 00	
Purchases		170,000 00
To close the Purchases account		
Returned Purchases and Allowances	1,200 00	
Profit and Loss		1,200 00
To close the Returned Purchases and Allowances account		
Inventory	46,500 00	
Profit and Loss		46,500 00
Inventory at the end of the year		
Profit and Loss	19,725 00	
Salesmen's Salaries		9,000 00
Advertising		4,875 00
Delivery Expense		2,150 00
Miscellaneous Selling Expense		800 00
Depreciation—Store Building		2,000 00
Depreciation—Store Fixtures		300 00
Depreciation—Delivery Equipment		600 00
To close the selling expense accounts		
Profit and Loss	7,200 00	
Insurance		400 00
Taxes		450 00
Office Salaries		3,500 00
Office Expense		2 000 00
Depreciation—Office Equipment		150 00
Bad Debts		700 00
To close the general expense accounts		
Delivery Income	600 00	
Rent Income	400 00	
Discount on Purchases	1,300 00	
Profit and Loss		2,300.00
To close the other income accounts		
Profit and Loss	3,250 00	
Interest Expense		1,500 00
Discount on Sales		1,750 00
To close the other expense accounts		

Profit and Loss	14,325.00	
Surplus		14,325.00
To transfer the net income to Surplus.		
Surplus	9,000.00	
Dividends		9,000.00
To close the Dividends account.		

Sixth step. Journal entries reversing the adjustments for deferred and accrued items are made and posted under date of January 1, 1949.

Advertising	375.00	
Catalogues		375.00
To reverse the adjustment for catalogues.		
Insurance	300.00	
Unexpired Insurance		300.00
To reverse the adjustment for unexpired insurance.		
Rent Collected in Advance	800.00	
Rent Income		800.00
To reverse the adjustment for unearned rent.		
Delivery Income	100.00	
Delivery Income Receivable		100.00
To reverse the adjustment for accrued delivery income.		
Accrued Interest Payable	300.00	
Interest Expense		300.00
To reverse the adjustment for accrued interest.		

The adjusting entries for bad debts and depreciation are not reversed.

Classification of accounts. Accounts are of two principal classes: real and nominal.

The balances of real accounts are used in the preparation of the balance sheet: they show assets, liabilities, and net worth. Real accounts remain open after the books have been closed.

The balances of nominal accounts show the changes in surplus during the period: they are used in preparing the statement of profit and loss and the statement of surplus. Nominal accounts are closed at the end of the period.

The following are illustrations of these two classes of accounts:

Real accounts:

Cash.
Accounts Receivable, and Reserve for Bad Debts.
Fixed asset accounts, and the related reserves for depreciation.
Accounts Payable.
Capital Stock.
Surplus.

Nominal accounts
Store Rent
Salary accounts
Taxes
Delivery Income
Dividends

Some accounts however cannot be classified as either real or nominal For instance the Advertising account in the trial balance on page 168 has a balance of $5 250 00 this balance includes

A real element the cost of catalogues on hand $375 00
A nominal element—the advertising expense for the period, $4 875 00

Such an account is called a *mixed* account An adjusting entry was made transferring the real element to a prepaid expense account, and the Advertising account was thus left with a balance representing only the nominal element

The Sales account is another illustration of a mixed account Credits to the Sales account include two elements the cost of the goods sold or the decrease in the asset of merchandise (a real element) and the gross profit or loss on the sales (a nominal element)

Do statements show facts or opinions? Many people seem to think that accounting is a mathematically exact science, and that the profit and loss statement, the statement of surplus, and the balance sheet are statements of fact—absolute facts to the last penny You have progressed far enough in the study of accounting to know that the statements are based on many estimates The provision for bad debts is an estimate based on somebody s guess as to the collectibility of the receivables A provision for depreciation is an estimate based on a guess as to the probable useful life of a fixed asset As you progress in the study of accounting you will find that many other matters are the subject of opinion and estimate

Objection to the term *net worth* In recent years a number of accountants have advocated discontinuing the use of the term *net worth* in balance sheets, and substituting some other term such as *owners equity* Their argument runs somewhat as follows

A balance sheet does not show valuations at which the assets could be converted into cash.

The realizable value of the receivables is only an estimate
The merchandise is not stated at the price at which it could be sold
The fixed assets are shown at cost less depreciation based on an estimate of useful life and not at the price at which they could be sold

Prepaid expenses, although properly deferred from an accounting standpoint, may have little or no cash value.

Since the assets are not stated in the balance sheet at what they are "worth," in the sense of what could be obtained for them in cash, the excess of the total of the asset side of the balance sheet over the total liabilities is not necessarily, or even probably, the amount the owners would have left if they disposed of all the assets and paid the debts.

Therefore, the term *net worth* is misleading because it implies that the assets are stated at what they are "worth."

Some title such as *owners' equity* would be better because it does not carry the implication of "worth," or present realizable value.

Although it is true that the assets are not shown in the balance sheet at realizable values, and although it also is true that many uninformed people may not be aware of that fact, the author doubts whether the mere substitution of the term *owners' equity* for *net worth* would be sufficient to clear away the misunderstanding. Although the proposed change in terminology may be desirable, it seems advisable, particularly in an introductory text, to use terms which are in accordance with present practice.

CHAPTER 13

Discounting Notes Receivable

Purposes of discounting notes receivable Instead of borrowing money from a bank by discounting our own note payable, as discussed in Chapter 7 we may obtain funds from a bank by endorsing, and transferring to the bank, any notes receivable held by us which are acceptable to the bank

The payee of a note may endorse it and transfer it to a creditor to apply on account, if the creditor is willing to take it

Endorsements Paper which is payable to the order of a named payee must be endorsed by the payee if it is to be transferred by him to some other party thus, if F K Hamilton, the payee of the illustrative note on page 78, wishes to transfer the note to John Smith Hamilton must endorse the note by writing his name across its back The party who endorses a note is called an *endorser*, the party to whom the note is transferred is called an *endorsee*

By the act of endorsement of a negotiable promissory note, the endorser assumes an obligation (subject to certain defenses) to pay the note to a subsequent holder if the maker fails to pay it at maturity This obligation is called a *contingent liability* For a complete discussion of the nature of the contingent liability of an endorser and the nature of his defenses you are referred to any good text on the law of negotiable instruments

Paper which is payable *to bearer* can legally be transferred by delivery without endorsement however, the party to whom the paper is to be transferred may require that it be endorsed, in order to make the transferor contingently liable for its payment

Endorsements are classified and illustrated as follows

(1) *Unqualified endorsements* (the transferor assumes the full contingent liability imposed by law upon an endorser)

(a) In full (shows the name of the party to whom the paper is transferred)

Pay to the order of
John Smith
F K Hamilton

The paper is still payable *to order*, that is Smith must endorse it in order to transfer it

(b) In blank (does not show the name of the party to whom the paper is transferred):

F. K. Hamilton

The paper is now payable to bearer and can legally be transferred by subsequent holders without endorsement.

(2) *Qualified endorsement* (the endorser limits his contingent liability by inserting the words *Without Recourse*):

(a) In full:

Pay to the order of
John Smith
Without Recourse
F. K. Hamilton

(b) In blank:

Without Recourse
F. K. Hamilton

One who endorses *without recourse* materially lessens his contingent liability as an endorser. He warrants that the paper is valid and that he has a good title to it, but he does not assume a legal obligation to pay the note merely because the maker does not do so.

(3) *Restrictive endorsement* (which must be in full):

(a) To prevent further transfers:

Pay to John Smith only
F. K. Hamilton

(b) To make the endorsee an agent for a special purpose:

Pay to the order of
First National Bank
For collection
F. K. Hamilton

Accommodation endorsements. A person who is not a party to a negotiable instrument may endorse it for the purpose of lending his credit. As an illustration of an endorsement for this purpose, assume that John Brown wishes to borrow $1,000.00 from the bank, and that the bank will not make the loan unless some person of good financial standing will endorse the note. Fred White agrees to accommodate Brown in this way. Brown makes a note payable to the bank, and White endorses it, thereby assuming a contingent liability to pay the note if Brown fails to do so.

Proceeds of a discounted note receivable. The proceeds of a discounted note receivable are computed as follows:

First, determine the value of the note at maturity (this is the amount which the holder of the note will be entitled to collect from the maker at maturity).

The maturity value of a non-interest note is the face.
The maturity value of an interest-bearing note is the face plus the interest for the full period of the note.

Second, determine the discount period, or time from the date of discount to maturity.

Third, compute the discount at the agreed rate, on the value at maturity, for the discount period.

Fourth, deduct the discount from the value at maturity.

Let us compute the proceeds of two notes receivable discounted

Maker	B Bates	C Cole
Date of note	August 1	August 1
Time from date of note to maturity	60 days	60 days
Date of discount	August 11	August 11
Discount period—or time from date of discount to maturity	50 days	50 days
Rate of interest borne by the note	None	5½%
Rate of discount charged	6%	6%
Computation of proceeds		
Face of note	$6,000 00	$6,000 00
Add interest from date of note to maturity.		
The Bates note does not bear interest		
Interest on the Cole note at 5½% for 60 days is		55 00
Value at maturity ...	$6,000 00	$6,055 00
Deduct discount at 6% for 50 days		
50 days' interest on $6,000 00 . .	50 00	
50 days' interest on $6,055 00 . ..		50 46
Proceeds	$5 950 00	$6 004 54

Discounting notes receivable at the bank. Let us assume that we own the Bates and Cole notes, which are recorded in the Notes Receivable account as follows

Notes Receivable

19— Aug	1	B Bates 60 da		6,000 00				
	1	C Cole 60 da 5½%		6,000 00				

Let us now assume that we discount these notes at the bank on August 11. Since we part with the notes, it may seem that the Notes Receivable account should be credited. But we should remember that, in order to transfer the notes to the bank, we must en-

dorse them, and thus render ourselves contingently liable for their payment. This contingent liability should be shown in the accounts. Therefore, we shall credit an account called Notes Receivable Discounted, as illustrated in the following entries*:

Bates note—for which we receive less than the face:

Cash....	5,950.00	
Interest Expense	50.00	
Notes Receivable Discounted		6,000.00
Note of B. Bates discounted at bank at 6%.		

Cole note—for which we receive more than the face:

Cash...	6,004.54	
Notes Receivable Discounted		6,000.00
Interest Income		4.54
C. Cole's 5½% note discounted at bank at 6%.		

The Notes Receivable and Notes Receivable Discounted accounts now appear as follows:

Notes Receivable

19—							
Aug.	11	B. Bates 60 da.	6,000 00				
	11	C. Cole 60 da. 5½%	6,000 00				

Notes Receivable Discounted

				19—			
				Aug.	11	B. Bates	6,000 00
					11	C. Cole	6,000 00

The *net* balance of the two accounts is zero, showing that we own no notes receivable.

Discounting notes receivable with a creditor. Let us assume that, instead of discounting the notes receivable at a bank, we transferred them on August 11 to a creditor, J. B. Houston, to apply on our account payable liability to him; let us also assume that they were discounted at 6%; the proceeds, therefore, were the same as computed above. Our entries to record the discounting of the notes with our creditor are shown below:

Bates note—for which we receive less than the face:

J. B. Houston......	5,950.00	
Interest Expense.	50.00	
Notes Receivable Discounted.......		6,000.00
Note of B. Bates transferred on account, discounted at 6%.		

* The illustrative entries throughout this chapter are given in general journal form for simplicity of explanation; it will be understood that entries for cash receipts and disbursements would be made in the cash books.

Cole note—for which we receive more than the face

J B Houston	6 004 54	
Notes Receivable Discounted		6 000 00
Interest Income		4.54
C Cole s 5½% note transferred on account discounted at 6%		

Discounted note paid by maker at maturity. Assume that Bates and Cole paid their discounted notes at maturity to the bank if they were discounted there, or to Houston if they were transferred to him We no longer have any contingent liability, and can therefore make the following entries

Notes Receivable Discounted	6 000 00	
Notes Receivable		6 000 00
To eliminate the Bates note and contingent liability from the accounts		
Notes Receivable Discounted	6 000.00	
Notes Receivable		6 000 00
To eliminate the Cole note and contingent liability from the accounts		

The two ledger accounts appear as follows

Notes Receivable

19—				19—			
Aug	1	B Bates 60 da	6 000 00	Sept	30	B Bates	6 000 00
	1	C Cole 60 da 5½%	6 000 00		30	C Cole	6 000 00

Notes Receivable Discounted

19—				19—			
Sept	30	B Bates	6 000 00	Aug	11	B Bates	6 000 00
	30	C Cole	6 000 00		11	C Cole	6,000 00

Discounted note dishonored by maker An endorser cannot be held on his contingent liability for the payment of a discounted note receivable unless the holder (endorsee) has presented it to the maker at maturity demanded and not received payment, and given proper notice of dishonor to the endorser

Let us assume that Bates and Cole dishonored their notes at maturity and that the holder took the proper steps to enforce collection from us Our entries will be

For payment of Bates note—which did not bear interest

B Bates	6 000 00	
Cash		6 000 00
Paid (bank or Houston) the Bates note discounted by us and dishonored by him		
(The payment is charged to Bates because we have a right to enforce collection from him)		

Notes Receivable Discounted	6,000.00	
Notes Receivable		6,000.00
To eliminate the Bates note and the contingent liability from the accounts.		
(This entry is made because there is no longer any contingent liability on the note. The contingent liability developed into a real liability, and was paid.)		

For payment of Cole note—which bore interest:

C. Cole	6,055.00	
Cash		6,055.00
Paid (bank or Houston) the Cole note discounted by us and dishonored by him, and 5½% interest thereon for 60 days.		
Notes Receivable Discounted	6,000.00	
Notes Receivable		6,000.00
To eliminate the Cole note and contingent liability from the accounts.		

Disposition of Notes Receivable Discounted account. You should observe that the entry debiting Notes Receivable Discounted and crediting Notes Receivable is made by the endorser at the maturity of a discounted note, *regardless of whether the note is paid by the maker or by the endorser.* If the note is paid by the maker, the endorser has no further liability. If the note is dishonored by the maker, the contingent liability becomes a real liability.

Protest. In some cases, notice of dishonor can be given to the endorser informally, either orally or in writing. In other cases, protest and formal notice of dishonor are required.

Protest is a formal declaration in writing by a notary public to the effect that he has presented an instrument to the person primarily liable thereon and demanded payment, and that the instrument has been dishonored. Notice of protest is sent by the notary public to the maker and to all the endorsers.

The holder of the paper (the endorsee) engages the services of the notary public and pays his fee, which he charges to the endorser. The endorser is then obligated to pay the face of the note, the protest fee, and any accrued interest.

Let us assume that the Cole note, discounted by us, was dishonored and protested, and that the protest fee was $2.04. Our entries at the time of payment will be:

C. Cole	6,057.04	
Cash		6,057.04
Payment of dishonored note, interest, and protest fee.		
Notes Receivable Discounted	6,000.00	
Notes Receivable		6,000.00
To eliminate the C. Cole note and the contingent liability from the accounts.		

Purpose of Notes Receivable Discounted account It should be understood that the Notes Receivable Discounted account is to be used to show the contingent liability on paper which we have owned and have transferred to other parties, thus assuming a contingent liability as a result of our endorsement

If we discount our own note payable, the transaction should be recorded by a credit to Notes Payable, to show the direct liability

Notes receivable and notes receivable discounted in the balance sheet Assume that a company's accounts with notes receivable and notes receivable discounted appear as follows.

Notes Receivable

19—						19—					
June	1	*Smith—30 da.*	*J1*	a	*1 000 00*	July	1	Smith	CR3	a	1 000 00
	10	Brown—30 da.	J2	b	2 000 00		10	Brown	J6	b	2 000 00
	20	White—60 da	J3	c	2 500 00						
	25	Green—60 da.	J4	d	3 000 00						

Notes Receivable Discounted

19—						19—					
July	10	Brown	J6	b	2 000 00	June	15	Brown	J2	b	2 000 00
							2	White	J3	c	2 500 00

These accounts show the following facts

The Smith note was received on June 1 and was collected on July 1

The Brown note was received on June 10, it was discounted on June 15, it matured on July 10, and the contingent liability was eliminated

The White note was received on June 20 it was discounted on June 25 it has not yet matured, therefore there is a contingent liability of $2,500 00

The Green note was received on June 25, it has not yet matured, and the company therefore has an asset of $3,000 00

The balance sheet should show the note receivable asset of $3,000 00 and the contingent liability of $2,500 00 The asset and the contingent liability can be determined from the balances of the two accounts, as follows

Debit balance of Notes Receivable account	$5 500 00
Credit balance of Notes Receivable Discounted account—amount to be shown as a contingent liability	2 500 00
Net balance of the two accounts—amount to be shown as note receivable asset	$3 000 00

The note receivable asset is shown in the balance sheet on the asset side. The contingent liability on notes receivable discounted is usually stated in a footnote. The procedure is illustrated below:

NAME OF COMPANY
Balance Sheet
July 31, 19—

Assets		Liabilities and Net Worth		
Cash	$ 750.00	Liabilities:		
Accounts Receivable	2,850.00	Accounts Payable	$ 2,000.00	
Notes Receivable	3,000.00	Notes Payable	1,000.00	$ 3,000.00
Inventory	6,780.00			
		Net Worth:		
		Capital Stock	$10,000.00	
		Surplus	380.00	10,380.00
	$13,380.00			$13,380.00

Note. On July 31, 19—, the company was contingently liable on notes receivable discounted in the amount of $2,500.00.

Discounted notes taken from debtor on account. Assume that Fred Dutton is indebted to us on an account receivable, and that he wishes to transfer to us, to apply on account, two notes which he holds and which are described as follows:

Maker	Date	Time	Interest Rate	Face
James Magee	June 1	60 days	—	$3,000.00
Horace Heald	" 10	60 days	6%	6,000.00

We are willing to take these notes from Dutton on June 15 at a value determined by discounting them at 6%. The proceeds are computed as follows:

Maker	Magee	Heald
Date of note	June 1	June 10
Period of note	60 days	60 days
Maturity	July 31	Aug. 9
Date of discount	June 15	June 15
Discount period	46 days	55 days
Rate of interest on note	—	6%
Rate of discount charged by us	6%	6%
Computation of proceeds:		
Face of note	$3,000.00	$6,000.00
Add interest on note from date of issuance to maturity		60.00
Value at maturity	$3,000.00	$6,060.00
Discount at 6% deducted by us:		
On $3,000.00 for 46 days	23.00	
On $6,000.00 for 55 days		55.55
Proceeds	$2,977.00	$6,004.45

Entries at acquisition

Notes Receivable	3 000 00	
Interest Income		23 00
Fred Dutton		2,977 00
James Magee 60-day non interest note due July 31 taken from Dutton on 6% discount basis to apply on account		

The $23 00 credit to Interest Income is the amount we will earn by carrying the note from June 15, the date of discount to July 31, the maturity

Notes Receivable	6 000 00	
Interest Income	4 45	
Fred Dutton		6 004 45
Horace Heald 60-day 6% note due August 9 taken from Dutton on 6% discount basis to apply on account		

We charge the $4 45 to Interest Income because when we collect the note and interest the Interest Income account will be credited with $60 00 The Interest Income account will then appear as follows

Interest Income

June	15		4 45	Aug	9		60 00

and the resulting credit balance of $55 55 will be the net amount we will earn by carrying the note from June 15 the date of discount, to August 9 the maturity

Observe that when we receive a note on a discounted basis the debit is to Notes Receivable—not to Notes Receivable Discounted The Notes Receivable Discounted account is used to show the contingent liability on notes which we endorse and transfer to others

Entries at maturity if note is collected from the maker,

If, at the maturity of the notes, they are collected from the makers, the entries are as follows

Cash	3 000 00	
Notes Receivable		3 000 00
Collection of note from James Magee		
Cash	6 060 00	
Notes Receivable		6 000 00
Interest Income		60 00
Collection of Horace Heald note and interest		

Entries at maturity if note is not collected from the maker

If, at the maturity of the notes, they are not collected from the makers but are *immediately* collected from Fred Dutton, the endorser, the entries will be the same as those shown above, except that the explanatory comment will indicate that the collections were made from the endorser

If the notes are dishonored by the makers, and are not immediately collected from the endorser, they should be charged back to the endorser from whom we received them, by entries as follows:

Fred Dutton	3,000.00	
Notes Receivable		3,000.00
To charge Dutton with the Magee note taken from Dutton to apply on account, and dishonored by Magee.		
Fred Dutton	6,060.00	
Notes Receivable		6,000.00
Interest Income		60.00
To charge Dutton with principal of, and interest on, the Heald note taken from Dutton to apply on account, and dishonored by Heald.		

CHAPTER 14

Bills of Exchange. Registers

Bills of Exchange

Definition. The following definition is quoted from the Uniform Negotiable Instruments Act

> A bill of exchange is an unconditional order in writing addressed by one person to another signed by the person giving it requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time a sum certain in money to order or to bearer

The parties to a bill of exchange are

The drawer—the person who signs the order
The drawee—the person to whom the bill is addressed and who is ordered to make the payment
The payee—the person to whom payment is to be made

Classification. Bills of exchange, or drafts, may be classified as follows

(A) As to the nature of the parties
  (1) Bills drawn on banks
  (2) Bills drawn on parties other than banks, these are known as *commercial bills*

(B) As to the number of parties
  (1) Three-party drafts—in which A orders B to pay C
  (2) Two-party drafts—in which A orders B to pay A In such a draft A is both the drawer and the payee

  Since there are always three parties to a draft (drawer, drawee, and payee), it would be more precise to use the expression *two-person draft* when one person is both drawer and payee However, *two-party draft* is the customary terminology

(C) As to the time when payment is to be made
  (1) Sight drafts—payable immediately upon presentation to the drawee
  (2) Time drafts—payable after a lapse of time

Bills Drawn on Banks

Bank check. A check is a bill of exchange; it is a written order in which the depositor (as drawer) orders the bank (as drawee) to pay a certain sum of money to a named person or to bearer. The payee is usually a third party, but the drawer may also be the payee. If a check is drawn payable to "Cash," the drawer is also the payee. Checks are payable at sight.

Certified check. A certified check is a check, drawn in the usual way, which has been presented by the maker or the payee to the bank upon which it is drawn, and which has been *certified* by the bank.

Certification is accomplished by an officer or employee of the drawee bank by writing (or rubber-stamping and writing) across the face of the check:

CERTIFIED
First National Bank
C. B. Smith
Cashier

The certification is an assurance by the bank that the drawer of the check has funds on deposit to meet the check, and that sufficient funds will be set apart from the depositor's account to pay the check when it is presented for payment. The maker may have the check certified because the payee will not accept it otherwise; sometimes a payee will have a check certified because he does not wish to cash it immediately but wishes assurance that it can be cashed when presented.

Bank draft. A bank draft is a bill of exchange drawn by a bank against its deposit in some other bank.

To illustrate the use of bank drafts, assume that John Brown, living in a small town in Iowa, wishes to make a remittance to a creditor in New York. The creditor may refuse to accept Brown's check on his local bank because he is not certain that Brown has a deposit there, or because the creditor in New York cannot cash a check on a country bank without paying an exchange fee. Brown therefore buys a draft drawn by his local bank on its deposit in a Chicago bank, paying for it in cash or by a check payable to his bank, and sends the draft to his creditor. When Brown buys the

bank draft, he may, as a precautionary measure, have it made payable to himself rather than to his creditor, and then endorse it to the creditor, if the draft is made payable to the creditor and becomes detached from the remittance letter, the creditor may be unable to determine from whom he received it.

FIRST STATE BANK No 1374

Farmington Iowa, September 22, 19--

Pay to the order of John Brown $300 00

Three Hundred no/100--- - -- - -- -- - - Dollars

To Douglas National Bank J. C. Wharton Cashier

Chicago, Illinois

Bank Draft

When Brown buys the draft from his bank, he may be required to pay the bank a small exchange fee for the service Such a fee is charged to Collection and Exchange.

Cashier's check. A cashier's check is a check drawn by a bank against itself.

CITY NATIONAL BANK AND TRUST COMPANY

of Chicago

CHICAGO ILL FEB 25 19-- 19 No. A131371

PAY TO THE ORDER OF Louis Werner* $10.00*

* Ten 00/100 **

Dollars

CASHIERS CHECK

Cashier's Check

To illustrate the use of the cashier's check, assume that Brown lived in Chicago instead of in an Iowa village. The creditor might

still be unwilling to accept Brown's personal check for fear it would prove worthless; but a cashier's check drawn by a Chicago bank against itself would usually be as acceptable to the creditor as a draft drawn by the Chicago bank against a deposit in a New York bank, because it would not be subject to the deduction of a charge for an exchange fee.

Two-Party Commercial Bills

Two-party sight draft. In the following sight draft, the same party (J. K. Graf & Co.) is both drawer and payee.

$100.00 Chicago, Illinois, July 20, 19--

At sight Pay to the order of OURSELVES

One Hundred-no/100 -------------------------- Dollars

To C. V. Olander

Decatur, Illinois. J.K.Graf & Co

Two-Party Sight Draft

Although the drawee is ordered by the drawer to pay the draft immediately upon presentation to him by the payee, he is under no obligation to do so unless he has agreed in advance to honor the draft.

Two-party sight draft for collection of an account. Two-party sight drafts are sometimes used in an attempt to obtain collection of a past-due account. To illustrate, assume that Olander owes Graf & Co. $100.00 on open account and pays no attention to letters requesting payment. Graf & Co. draw the above draft, endorse it as follows:

Pay to the order of
First National Bank of Chicago
For Collection
J. K. Graf & Co.

and leave it with the First National Bank. This bank in turn endorses it to some bank in Decatur, preferably the bank in which Olander keeps his account. The Decatur bank then presents it to Olander for payment. Although Olander is under no greater obliga-

tion to pay the draft than he is to respond to the collection letters, he may do so in order to preserve a good credit standing with his bank

If Olander pays the draft to his local bank, that bank will remit the proceeds to the First National Bank of Chicago, after deduction of a collection fee The Chicago bank may also charge a collection fee

The entries to be made by the two parties to a sight draft drawn for purposes of the collection of an account receivable are illustrated below

*Sequence of Entries**

July 20—Draft drawn by Graf & Co

Graf & Co should make no entry at the time of drawing the draft since the draft may not be collected If it is not collected, no entry of any kind will be made

July 22—Draft presented to Olander by Decatur bank

If Olander refuses to pay the draft when it is presented to him he will make no entry If he pays the bank the amount of the draft, he will make the following entry

J K Graf & Co	100 00	
Cash		100 00
Payment of sight draft		

July 23—Proceeds credited by Chicago bank to Graf & Co

When Graf & Co receive notice from the Chicago bank that the draft has been collected and that the proceeds (after deduction of $ 30 collection fees charged by the Decatur and Chicago banks for their services) have been credited to their account, they will make the following entry

Cash	99 70	
Collection and Exchange	30	
C V Olander		100 00
Proceeds of sight draft		

Two-party sight draft for C O D. shipment When the seller of merchandise which is to be shipped by freight wishes to make the sale on C O D terms, he may obtain an order bill of lading from the railroad When an order bill of lading is used, the purchaser cannot obtain the merchandise from the carrier without presenting the bill of lading

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* Illustrative entries throughout this chapter are given in general journal form for simplicity

The seller attaches the bill of lading to a sight draft payable to himself. He endorses the bill of lading and the draft, and leaves them with his bank. The bank sends the draft, with bill of lading attached, to a bank in the purchaser's city: this bank notifies the purchaser that it holds the sight draft and the bill of lading. The purchaser goes to the bank, pays the draft, and obtains the bill of lading. The bank returns the proceeds to the shipper's bank, which credits the shipper's account. Either or both of the banks may charge a collection fee.

C.O.D. shipments may be made by freight without using a sight draft and order bill of lading, since railroads will undertake to collect the amount of the invoice from the purchaser of the goods and remit the money to the seller.

Sequence of Entries

August 12—Wheeler & Co. sell merchandise to James Kent, terms sight draft with bill of lading attached.

Wheeler & Co. make the following entry:

James Kent	500 00	
Sales		500 00
Sale to Kent, terms, sight draft with bill of lading attached.		

August 14—Kent is notified by the railroad that the goods have been received, and he is notified by the bank that the sight draft has been received. He goes to the bank, pays the draft, and receives the bill of lading; he presents the bill of lading to the railroad and receives the merchandise.

James Kent makes the following entries:

Purchases	500 00	
Wheeler & Co		500 00
Purchase of merchandise, terms, s/d, b/l (meaning sight draft with bill of lading).		
Wheeler & Co . .	500 00	
Cash .		500 00
Payment of sight draft		

August 15—Wheeler & Co. are notified by their bank that the draft on Kent has been collected, and that the proceeds, $499.50, have been credited to their account.

Wheeler & Co. make the following entry:

Cash	499 50	
Collection and Exchange	.50	
James Kent . . .		500 00
Receipt of proceeds of draft		

Two-party time draft. A two party time draft is illustrated below

$100 00	Chicago Illinois, July 20, 19__
Thirty days after date Pay to the order of OURSELVES	
One Hundred-no/100 ---------------- Dollars	
To George Hill	
Freeport Illinois	Peter Rowe

Two-Party Time Draft

Acceptance. A time draft should be presented to the drawee to obtain his agreement to pay it at maturity This agreement is called *acceptance* of the draft and is expressed by writing across the face of the draft

Accepted
(Drawee s signature)

After a time draft has been accepted by the drawee, it is called an *acceptance* Thus the word *acceptance* has two meanings the act of accepting, and an accepted draft

Time drafts may be payable

(1) A certain period after the date of the paper, in such cases the time is expressed thus

"Thirty days after date, pay to the order of (etc)"

A draft drawn on June 15, payable thirty days after date, will be due on July 15, regardless of the date on which it is accepted Since the date of acceptance has no bearing on the maturity of the draft, the date of acceptance need not be shown

(2) A certain period after the date when the draft is accepted by the drawee, the time may be expressed thus

"Thirty days after sight, pay to the order of (etc)," *or*
"At thirty days' sight, pay to the order of (etc)"

A draft drawn on June 15, payable thirty days after sight, and accepted on June 20, will be due on July 20 Since

the date of acceptance of such a draft determines the date of its maturity, the date of acceptance should be shown, thus:

Accepted
June 20, 19—
(Drawee's signature)

Accounts with notes and acceptances. An accepted time draft, like a promissory note, is a debtor's written agreement to pay a certain sum of money at a fixed or determinable future date. Therefore, most accountants record acceptances receivable in the Notes Receivable account, and acceptances payable in the Notes Payable account.

Although a few accountants prefer to keep separate accounts with Notes Receivable and Acceptances Receivable, and separate accounts with Notes Payable and Acceptances Payable, this distinction is usually considered unnecessary.

Two-party time draft for collection purposes. Two-party time drafts are occasionally used to reduce a past-due account to a written promise to pay. If a debtor will not pay his account, he may consent to give a promissory note or accept a time draft. If a time draft is used, it is drawn by the creditor and sent to the debtor for acceptance.

If the debtor accepts the draft, the following entries are made by the two parties:

Drawee's journal entry:

Creditor's name	100.00	
Notes Payable		100.00
To record acceptance of draft.		

Drawer's journal entry:

Notes Receivable	100.00	
Debtor's name		100.00
To record receipt of acceptance.		

Two-party time draft per terms of sale. Sometimes the terms of sale require the purchaser of merchandise to accept a time draft for the amount of the invoice. This is desirable from the seller's standpoint for two reasons: first, the debtor's obligation is reduced to writing and has a definite maturity: second, the seller can discount the acceptance.

If the purchaser has established a credit standing with the seller. the merchandise is shipped on a straight bill of lading and the draft

is sent to the purchaser for acceptance. To assure obtaining acceptance of the draft before delivery of the goods, a draft with an order bill of lading attached may be sent to a bank in the purchaser's city. The purchaser must accept the draft before the bank will release the bill of lading.

Sequence of Entries

Seller's entry at time of sale

Customer's name	300 00	
Sales		300 00
Sale of merchandise, terms, 30-day acceptance		

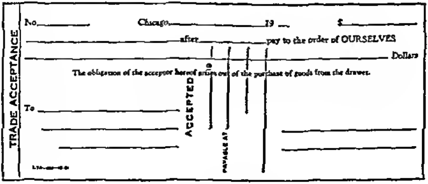
Purchaser's entry at time of receipt of goods and acceptance of draft

Purchases	300 00	
Creditor's name		300 00
Purchase of merchandise, terms, draft due 30 days after sight		
Creditor's name	300 00	
Notes Payable		300 00
Acceptance of 30-day draft for amount of purchase today		

Seller's entry when acceptance is received

Notes Receivable	300 00	
Customer's name		300 00
Acceptance received		

A time draft drawn by the seller on the purchaser of goods sold, accepted by such purchaser, and bearing on its face the evidence that the draft arose from a sale of merchandise, is called a *trade acceptance.*



Trade Acceptance

Trade acceptances are used in connection with transactions of the nature just described.

Three-Party Commercial Bills

Three-party sight draft. The following is an illustration of a three-party sight draft:

$100.00 Chicago, Ill., July 15, 19--

At sight Pay to the order of

C. H Dawson

One Hundred-no/100-------------------------- Dollars

Value received, and charge to the account of

To D. B. Perkins E G Luther

San Francisco, California

Three-Party Sight Draft

To illustrate the use of such a draft, assume that:

Perkins (living in San Francisco)
owed $100.00 to
Luther (living in Chicago)
who owed $100.00 to
Dawson (living in San Francisco).

Luther drew a draft ordering Perkins to pay Dawson; if the payment was made, both debts were settled by one transfer of money in San Francisco, without the transfer of funds from San Francisco to Chicago, and back again.

In the early days, before the development of bank facilities, such drafts were not infrequently used, particularly when the drawee and the payee lived in the same city and a considerable distance from the drawer. With the bank facilities which are now generally available for the transfer of funds, such drafts are rarely used. Perkins would probably send a check to Luther, and Luther would send one to Dawson.

The entries of the three parties are shown below:

When Luther draws the draft and sends it to Dawson:

Although Luther does not know that the draft will be paid, he makes the entry shown on page 198 on the assumption that it will be paid.

C H. Dawson	100 00	
D B Perkins		100 00
Sight draft drawn on Perkins in favor of Dawson.		

Luther makes this entry because he is not sure that either party will notify him if the draft is paid, but he can be sure that Dawson will notify him if Perkins refuses to pay it If Dawson does so notify him, Luther will reverse the entry

If Dawson collects the draft from Perkins

Dawson will make the following entry

Cash	100 00	
E G Luther		100 00
Collected from D B Perkins the draft drawn by Luther		

Perkins will make the following entry

E. G Luther	100 00	
Cash		100 00
Paid C H. Dawson the draft drawn by Luther		

If Dawson fails to collect the draft from Perkins

No entry will be made by Dawson or Perkins Dawson will notify Luther of the failure to make the collection, and Luther will make the following entry

D B Perkins	100 00	
C H. Dawson		100 00
To reverse entry made when draft was drawn on Perkins in favor of Dawson. Perkins refused to pay the draft.		

Three-party time drafts Three-party time drafts are also nearly obsolete To illustrate the entries incident to their use, assume that the three-party draft used as the basis of the preceding illustration had been drawn to mature 30 days after date

When Luther draws the draft and sends it to Dawson

Luther will make the following entry

C H. Dawson	100 00	
D B Perkins		100 00
Drew 30-day draft on Perkins, favor of Dawson.		

If Perkins accepts the draft

Dawson will make the following entry

Notes Receivable	100.00	
E. G Luther		100 00
D B Perkins accepted 30-day draft drawn by E. G Luther		

Perkins will make the following entry if he accepts the draft drawn by Luther:

E. G. Luther	100.00	
Notes Payable		100.00
Accepted 30-day draft drawn by E. G. Luther, favor of C. H. Dawson.		

If Perkins refuses to accept the draft:

No entry will be made by Dawson or Perkins. Dawson will notify Luther that Perkins refused to accept the draft, and Luther will reverse the entry he made when he drew the draft.

When Perkins pays Dawson:

Dawson will make the following entry:

Cash	100.00	
Notes Receivable		100.00
Collected draft drawn by E. G. Luther on D. B. Perkins.		

And Perkins will make the following entry:

Notes Payable	100.00	
Cash		100.00
Paid draft drawn by E. G. Luther, favor of C. H. Dawson.		

Discounting acceptances receivable. Acceptances receivable may be discounted in the same manner that notes receivable are discounted. To illustrate the discounting of an acceptance receivable, assume the following facts:

On July 10 we sold merchandise to J. H. Gorham, for $600.00.

In accordance with the terms of the sale, we drew a 30-day draft, dated July 10, on Gorham for the amount of the invoice. Gorham accepted the draft.

On July 14 we discounted the acceptance at the bank. The discount rate was 6%, and the proceeds received from the bank were $597.40.

Our entry to record the discounting of the acceptance receivable is:

Cash	597.40	
Interest Expense	2.60	
Notes Receivable Discounted		600.00
Discounted Gorham acceptance.		

Registers

Notes receivable register. If many notes and acceptances are received, it is desirable to keep a supplementary record called a Notes Receivable Register, where spaces are provided for more detailed information about the notes and acceptances than can be entered in the Explanation columns of the Notes Receivable account This register is a supplementary book, the entries in it do not take the place of those in the journal and the ledger, but details can be omitted from the Explanation columns of the ledger account

An illustration is presented below It shows (1) the illustrative transactions, (2) the entries (in journal form) to record them, (3) the accounts, and (4) the notes receivable register

Peterson note

On May 12, a 30 day, non interest note for $1,000 00, dated May 12, payable at our office, was received from O B Peterson, to apply on account

Notes Receivable	1,000 00	
O B Peterson		1,000 00

On June 11, the note was collected

Cash	1,000 00	
Notes Receivable		1,000 00

Smith note

On May 21, a 60-day, 6% note for $1,500 00, dated May 20, payable at the State Bank, was received from H D Smith to apply on account

Notes Receivable	1,500 00	
H D Smith		1 500 00

On July 19, when the note matured, the maker dishonored it, and it was charged back to his account

H D Smith	1,515 00	
Notes Receivable		1 500 00
Interest Income		15 00

On July 21, Smith paid us $315 00 in cash, and gave us a new 6% note, payable in three months at our office, for $1,200 00

Cash	315 00	
H. D Smith		315 00
Notes Receivable	1 200 00	
H. D Smith		1,200 00

Norton acceptance:

On July 24, we drew a $900.00 draft on Henry Norton, payable 60 days after date. Norton accepted the draft, and returned it to us. We received it on July 25.

Notes Receivable	900.00	
Henry Norton		900.00

The acceptance has not yet matured.

Dudley note:

On July 26, a $500.00 non-interest note dated July 23, due in 60 days, payable at our office, was received from Frank Dudley to apply on account.

Notes Receivable	500.00	
Frank Dudley		500.00

On July 29, this note was discounted at the State Bank; the discount rate was 6%, the discount period was 54 days, and the discount was $4.50.

Cash	495.50	
Interest Expense	4.50	
Notes Receivable Discounted		500.00

Forbes note:

On August 23, Kenneth Armstrong offered to transfer to us a note for $3,000.00 signed by Henry Forbes, payable to Armstrong, dated August 11, due in 60 days without interest. We agreed to take the note at its discounted value; discount rate, 6%.

Notes Receivable	3,000.00	
Interest Income		24.00
Kenneth Armstrong		2,976.00

This acceptance has not matured.

Link acceptance:

On September 3, G. S. Wilson drew a draft for $500.00 on David Link, payable to us 30 days after sight. We presented the draft to Link on September 5, and he accepted it.

Notes Receivable	500.00	
G. S. Wilson		500.00

Although the acceptance is payable by Link, we credit Wilson because it was Wilson who was indebted to us, and Link is making the payment for Wilson.

The Notes Receivable and Notes Receivable Discounted accounts appear as follows

Notes Receivable

9—					19—				
1ay	12			1 000 00	June	11			1 000 00
	21			1 500 00	July	19			1 500 00
ıly	21			1 200 00					
	25			900 00					
	26			500 00					
ug	23			3 000 00					
pt	5			500 00					

Notes Receivable Discounted

					19—				
					July	29			500 00

The notes receivable register appears on page 203 The letters the first column indicate whether the paper is a note or an acceptance The letters *J*, *F*, *M*, and so forth at the head of the narrow ılumns indicate months of maturity, and the numbers in these lumns indicate the dates of maturity

The Notes Receivable account has a debit balance of $6,100 00 his balance is the total of the last five notes and acceptances in the gister

The Notes Receivable Discounted account has a credit balance of 00 00, the face of the Dudley discounted note

Notes payable register An illustration of notes and acptances payable transactions is presented below

Bank loan

On March 1, we discounted at the First National Bank our *60 day note for $5 000 00 discount rate 6%*

Cash	4 950 00	
Interest Expense	50 00	
Notes Payable		5 000 00

Slocum acceptance

On March 10 we accepted a 30-day sight draft for $1,150 00, drawn by Frank Slocum on March 9, payable at his office

Frank Slocum	1 150 00	
Notes Payable		1,150 00

On April 9, the acceptance was paid

Notes Payable	1 150 00	
Cash		1,150 00

Notes Receivable Register

N A	Date Received		Date of Paper		Maker or Drawer	Drawer or Endorser	Where Payable	Time Mo	Time Da	Int Rate	Year	J	F	M	A	M	J	J	A	S	O	N	D	Amount	Date Paid		Remarks
	19—		19—																						19—		
N	May	12	May	12	O. B. Peterson		Our office		30	--	19—						11							1,000.00	June	11	
N		21		20	H. D. Smith		State Bank		60	6%	19—							19						1,500.00	Dishonored.		See new note below.
N	July	21	July	21	H. D. Smith		Our office	4		6%	19—										21			1,200.00			
A		27		21	Henry Norton	Ourselves			60	—	19—									22				900.00			
N		29		23	Frank Dudley		Our office		60	—	19—									20				500.00	Disc		at State Bank, July 29.
N	Aug	23	Aug	11	Henry Forbes	Kenneth Armstrong			60	—	19—										10			3,000.00			
A	Sept	5	Sept	3	David Link	G. S. Wilson			30	—	10—										5			500.00			

Notes Payable Register

N A	Date Given		Date of Paper		Payee	Endorser or Drawer	Where Payable	Time Mo	Time Da	Int Rate	Year	J	F	M	A	M	J	J	A	S	O	N	D	Amount	Date Paid		Remarks
	19		19																						19—		
N	Mar	1	Mar	1	First National Bk		Bank		60	Disc	19—				30									5,000.00			
A		10		9	Frank Slocum		His office		30	—	19—				9									1,150.00	Apr	9	
N		17		17	George Bailey			2		6%	19					17								750.00			
A		26		21	William Lee	Louis Bennett			30	—	19—				25									1,000.00			

Bailey note:

On March 17, we gave George Bailey a 6%, two-month note for $750 00.

George Bailey	750 00	
Notes Payable		750 00

Lee acceptance

On March 24, Louis Bennett drew a 30-day sight draft on us, payable to William Lee, for $1,000.00 We accepted the draft on March 26.

Louis Bennett	1,000 00	
Notes Payable		1,000 00

The Notes Payable account appears below.

Notes Payable

Date				Amount	Date				Amount
19—					19—				
Apr	9			1,150 00	Mar	1			5,000 00
						10			1,150 00
						17			750 00
						26			1,000 00

The notes payable register appears on page 203.

CHAPTER 15

The Voucher System

Purposes of the voucher system. The voucher system involves the use of:

Vouchers.
A voucher register.
A check register.

A voucher used in connection with a voucher system is a document which must be prepared before a check can be drawn to make a cash disbursement, and which serves the very desirable purpose of providing safeguards against improper and unauthorized disbursements. In a small business the proprietor may sign all the checks: before signing a check, he can satisfy himself that the disbursement is a proper one. In large businesses this work must be delegated to others, and the system of office procedure and internal control should be such as to give assurance that responsible employees have satisfied themselves as to the propriety of each disbursement: also there should be documents supporting the disbursements to indicate what member of the organization satisfied himself of the propriety of the disbursement and approved it. A voucher is such a document; it contains spaces for the initials or signatures of the various persons who checked the invoices or other papers related to the transaction and who authorized the disbursement.

The voucher register is a book of original entry with numerous columns which provide many of the advantages of the columnar books of original entry discussed in preceding chapters. As will be explained in this chapter, the voucher register also serves the purposes of a subsidiary accounts payable ledger: therefore, it has the added advantage of saving labor by eliminating postings to such a ledger.

The check register is a cash disbursements book under another name. Because the voucher register contains numerous columns for accounts to be debited for expenditures, the check register is usually a very simple book, with few columns.

Voucher system routine. The operation of a voucher system involves the following steps:

(1) Preparing the voucher.

(2) Recording the voucher in the voucher register.

(3) Filing the voucher until the date of payment, if payment is to be made at a later date.

(4) Paying the voucher

(5) Recording the payment

(6) Filing the paid voucher

(1) *Preparing the voucher* Chapter 5 contains a description of the method of checking invoices received from creditors (See pages 55 and 56) If a voucher system is in use, the checking of the invoice is followed by the preparation of a voucher. The face and back of a voucher are illustrated on page 207

The steps in the preparation of this voucher were as follows

(a) A voucher clerk typed the information shown on the face of the voucher and in the Summary section on the back of the voucher

(b) The voucher clerk attached to the face of the voucher the invoice and any other documents related to the transaction He then sent the voucher to the controller

(c) The controller examined the voucher and the documents attached to it, and assured himself that the checking of the invoice, as described in Chapter 5, had been performed, and that R E Johnson & Company actually owed the amount of the voucher His signature on the voucher indicates that he made this examination

(d) The face of the voucher indicates that merchandise was purchased and that a liability of $270 00 was incurred These facts had to be recorded In a large business, much of the work may be done by assistant bookkeepers who must be told what accounts to debit and credit Therefore, the back of the voucher may be printed with the names of accounts most frequently debited, and blank lines may be left on which to write the names of other accounts which may be debited Before the voucher was given to the assistant bookkeeper to be recorded, the head bookkeeper (or some other employee competent to do so) filled in the Distribution section on the back of the voucher to indicate the debit to be made by the assistant bookkeeper The name of the account to be credited is not stated on the back of the voucher, because all credits are made to a liability account called Vouchers Payable.

(2) *Recording the voucher* When a voucher system is used, all vouchers are recorded in a special book of original entry called a

R. E. JOHNSON & COMPANY 2913 North Western Avenue Chicago, Illinois	Voucher No. 1693
	Date July 6, 19--
	Terms 1/10; n/30
Payee The Osborne Company, 215 West Canal Street, Chicago, Illinois	Due July 12
	Check No.

Invoice Date	Invoice No.	Amount
July 3, 19--	2397	270.00
Cash Discount		2.70
Net		267.30

Approved *G. A. Oliver* Controller — Passed for Payment ______ Treasurer

Face of Voucher

Distribution		Summary	
Purchases	270.00	Voucher No.	1693
Freight In		Date	July 6, 19--
Freight Out		Date Due	July 12, 19--
Advertising		Date Paid	
Salesmen's Salaries		Check No.	
Delivery Expense		Amount of check	
Misc. Selling Expense		To	The Osborne Company,
Office Salaries			215 W. Canal Street,
Officers' Salaries			Chicago, Illinois.
Office Supplies		Amount	270.00
Stationery & Printing		Discount	2.70
Postage		Net	267.30
Insurance			
Taxes			
Notes Payable			
Interest Expense			
Total	270.00		

(Voucher is folded here)

Back of Voucher

Voucher register The illustration on page 209 shows how the voucher on page 207 was recorded in a voucher register

Note the following facts with respect to the voucher register

Numerous explanatory columns are provided at the left for miscellaneous information about the transactions

The Vouchers Payable column is a credit column, the amount of each voucher is recorded in this column, and the column total is posted at the end of the month to the credit of the controlling account with Vouchers Payable The Vouchers Payable account is the Accounts Payable controlling account under a slightly different name

All the other columns are debit columns Special columns are provided for all accounts frequently debited (Later illustrations contain many more special columns) Debits to accounts for which special columns are not provided are recorded by entries in the *Sundry Accounts* debit section at the right of the register where space is provided to write the names of the accounts debited as well as the amounts

The entry in the voucher register debits Purchases and credits Vouchers Payable

(3) *Filing the voucher until payment* After the voucher was recorded in the voucher register it was folded (at the line indicated in the illustration on page 207, of the back of the voucher and with the documents inside) and was filed in a tickler A tickler is a file divided into sections by months, subdivided by days

The illustrative voucher shows that a 1% discount can be taken if payment is made within 10 days from the date of the invoice It also shows (on the Date Due line) the date when payment should be made so that the remittance will reach the creditor in time to justify taking the discount This date is July 12 Therefore, the voucher is filed in the July 12 space of the tickler, so that it will receive attention on that date

You can now see the purpose of the Summary section on the back of the voucher This section shows most of the important facts relative to the voucher The voucher is filed with this section facing to the front, anyone looking through the voucher file for a particular voucher can locate it without being obliged to open the vouchers to read from the face

(4) *Paying the voucher* On July 12 the voucher was taken from the tickler and sent to the treasurer for approval of payment The treasurer examined the documents, and authorized the payment by signing the voucher on the line "Passed for payment" The cashier then performed the operations stated on page 210

Voucher Register

Voucher No.	Date		Payee	Explanation	Terms	Date Paid	Check No.	Credit Vouchers Payable	Debits				
									Purchases	Freight In	Sundry Accounts		
											Name of Account	L F	Amount
	19--												
1693	July	6	The Osborne Company....	Invoice, July 3	1/10; n/30			270.00	270.00				

The cashier

(a) Drew a check
(b) Entered in the Summary section (on the back of the voucher) the date of payment, the number of the check, and the amount of the check
(c) Sent the check to the creditor
(d) Sent the voucher to the bookkeeper, for recording of payment

(5) *Recording the payment* The notations made by the cashier in the Summary section on the back of the voucher (on the lines for Date Paid, Check No , and Amount of Check) furnished the bookkeeper with all the information that he required to record the payment The recording of the payment included

(a) Making an entry in a check register

The check register on page 211 shows how the payment was recorded Observe that the entry shows the number of the check issued and the number of the voucher paid Vouchers Payable account is debited, and Discount on Purchases and Cash are credited

(b) Writing notations in the Date Paid and Check No columns of the voucher register Observe the notations in these columns in the voucher register on page 211

(6) *Filing the paid voucher* After the entry was made in the check register and the notations were made in the voucher register, the voucher was filed in a paid voucher file Paid vouchers usually are filed in numerical order, so that they can be found easily

Since each voucher is signed by persons having authority to approve the expenditure, and has attached to it the creditor's invoice and any other supporting documents, it furnishes evidence of the propriety of the entries in the voucher and check registers

Vouchers for immediate disbursements The preceding discussion shows the procedure to be followed if some time elapses between the drawing of the voucher and its payment The procedure is exactly the same for transactions involving the immediate payment of the voucher except that step 3 (the filing of the voucher in a tickler to await the payment date) is omitted The other steps are

Preparing the voucher
Recording the voucher in the voucher register.
Paying the voucher
Recording the payment
Filing the paid voucher

Check Register

Check No.	Date		Payee	Voucher No.	Debit Vouchers Payable	Credits: Discount on Purchases	Credits: Cash
	19—						
1668	July	12	The Osborne Company..	1693	270.00	2.70	267.30

Voucher Register

Voucher No.	Date		Payee	Explanation	Terms	Date Paid		Check No.	Credit Vouchers Payable	Debits: Purchases	Debits: Freight In	Debits: Sundry Accounts: Name of Account	L. F.	Amount
	19—													
1693	July	6	The Osborne Company....	Invoice, July 3	1/10; n/30	July	12	1668	270.00	270.00				

You may wonder why an entry is made in the voucher register with a credit to Vouchers Payable (a liability account) when payment is made immediately The reason is When a voucher system is in operation, no check can be drawn without a supporting voucher and each voucher must be recorded, the credit to the Vouchers Payable account in the voucher register is immediately offset by a debit to Vouchers Payable in the check register

Extended illustration A voucher register and a check register, containing the record of a month s transactions, appear on pages 214, 215, and 216 To provide a large number of distributive debit columns, the voucher register extends across two facing pages (In the illustration, the left page is printed above the right page)

You should observe how these transactions are recorded in the voucher register and the check register

Summary of August Transactions and Entries

Aug. 1—Received merchandise from Barnard & Co

Voucher Register	Check Register
Purchases	(Later)
Vouchers Payable	

3—Paid freight on merchandise purchased

Voucher Register	Check Register
Freight In	Vouchers Payable
Vouchers Payable	Cash

The date paid and check number are entered in the voucher register (This should be done each time a voucher is paid.)

4—Paid Daily News for advertising

Voucher Register	Check Register
Advertising	Vouchers Payable
Vouchers Payable	Cash

4—Paid freight

Voucher Register	Check Register
Freight In	Vouchers Payable
Freight Out	Cash
Vouchers Payable	

5—Paid Davis Supply Co for office supplies and stationery

Voucher Register	Check Register
Office Supplies	Vouchers Payable
Stationery and Printing	Cash
Vouchers Payable	

7—Paid G. E. Wilson for note and interest:

Voucher Register	Check Register
Notes Payable	Vouchers Payable
Interest Expense	Cash
Vouchers Payable	

The debit to Notes Payable was entered in the Sundry Accounts section.

8—Paid Barnard & Co. voucher 1:

Voucher Register	Check Register
(Notations in Date Paid and Check Number columns)	Vouchers Payable
	Discount on Purchases
	Cash

10—Received merchandise from L. N. Whitely:

Voucher Register	Check Register
Purchases	
Vouchers Payable	(Later)

15—Paid store rent for the month:

Voucher Register	Check Register
Store Rent	Vouchers Payable
Vouchers Payable	Cash

The debit was entered in the *Sundry Accounts* columns.

17—Received merchandise from F. R. Mason & Co.:

Voucher Register	Check Register
Purchases	
Vouchers Payable	(Later)

19—Paid L. N. Whitely voucher 7:

Voucher Register	Check Register
(Notations in Date Paid and Check Number columns.)	Vouchers Payable
	Discount on Purchases
	Cash

23—Paid Acme Garage for August rent:

Voucher Register	Check Register
Delivery Expense	Vouchers Payable
Vouchers Payable	Cash

26—Received merchandise from George Martin:

Voucher Register	Check Register
Purchases	
Vouchers Payable	(Not paid in August)

You should understand that the illustration on these two pages represents two wide facing sheets of a voucher register The left side of the register appears at the top of pages 214 and 215 The right side of the register appears at the bottom of the two pages

Left page

Line No	Voucher No	Date		Payee	Explanation	Terms	Date Paid	
		19—					19—	
1	1	Aug	1	Barnard & Co	Invoice, Aug 1	2/10, n/30	Aug	8
2	2		3	C N W Ry				3
3	3		4	Daily News	Bill dated Aug 3	Cash		4
4	4		4	C N W Ry				4
5	5		5	Davis Supply Co	Invoice 317	Cash		5
6	6		7	G E Wilson	Note dated July 8			7
7	7		10	L N Whitely	Invoice Aug 9	1/10, n/30		19
8	8		15	B N Haines	Rent for August			15
9	9		17	F R Mason & Co	Invoice 2425	2/10 n/30		26
10	10		23	Acme Garage	Rent for August			23
11	11		26	George Martin	Invoice 1372	1/10, n/30		
12	12		28	Postmaster				28
13	13		30	Dalton & Doane	Invoice 3639	2/10, n/30		
14	14		31	Payroll				31
15								
16								

Register

DEBITS

Line No	Delivery Expense	Miscellaneous Selling Expense	Office Salaries	Officers' Salaries	Office Supplies	Stationery and Printing	Postage
1							
2							
3							
4							
5					30 00	75 00	
6							
7							
8							
9							
10	25 00						
11							
12							25 00
13							
14	175 00		125 00	300 00			
15	200 00		125 00	300 00	30 00	75 00	25 00
16	(45)		(51)	(52)	(53)	(54)	(55)

Voucher

Check No.	Credit Vouchers Payable	Debits: Purchases	Freight In	Freight Out	Advertising	Salesmen's Salaries	Line No.
6	1,500.00	1,500.00					1
1	18.00		18.00				2
2	150.00				150.00		3
3	35.00		20.00	15.00			4
4	105.00						5
5	1,005.00						6
8	3,500.00	3,500.00					7
7	200.00						8
10	2,600.00	2,600.00					9
9	25.00						10
	1,750.00	1,750.00					11
11	25.00						12
	1,875.00	1,875.00					13
12	850.00					250.00	14
	13,638.00	11,225.00	38.00	15.00	150.00	250.00	15
	(11)	(31)	(35)	(41)	(42)	(44)	16

Right page

Interest Expense	Sundry Accounts: Name of Account	L.F.	Amount	Remarks	Line No
					1
					2
					3
					4
					5
5.00	Notes Payable.	12	1,000.00		6
					7
	Store Rent.	43	200.00		8
					9
					10
					11
					12
					13
					14
5.00			1,200.00		15
(61)					16

26—Paid F R Mason & Co voucher 9:

Voucher Register	Check Register
(Notations in Date Paid and Check Number columns)	Vouchers Payable Discount on Purchases Cash

28—Purchased postage stamps

Voucher Register	Check Register
Postage Vouchers Payable	Vouchers Payable Cash

30—Received merchandise from Dalton & Doane

Voucher Register	Check Register
Purchases Vouchers Payable	(Not paid in August)

31—Paid salaries for the month

Voucher Register	Check Register
Salesmen's Salaries Delivery Expense Office Salaries Officers' Salaries Vouchers Payable	Vouchers Payable Cash

The foregoing transactions are recorded in the voucher register on pages 214 and 215, and in the following check register.

Check Register

Check No	Date		Payee	Voucher No	Debit Vouchers Payable	Credit: Discount on Purchases	Credit: Cash
	19—						
1	Aug	3	C N W Ry	2	18 00		18 00
2		4	Daily News	3	150 00		150 00
3		4	C N W Ry	4	35 00		35 00
4		5	Davis Supply Co	5	105 00		105 00
5		7	G E Wilson	6	1,005 00		1,005 00
6		8	Barnard & Co	1	1,500 00	30 00	1,470 00
7		15	B N Haines	8	200 00		200 00
8		19	L N Whitely	7	3,500 00	35 00	3,465 00
9		23	Acme Garage	10	25 00		25 00
10		26	F. R Mason & Co	9	2,600 00	52 00	2,548 00
11		28	Postmaster	12	25 00		25 00
12		31	Payroll	14	850 00		850 00
					10 013 00	117 00	9,896 00
					(11)	(71)	(1)

Posting from the voucher register. The entries in the Sundry Accounts debit section should be posted during the month. At the end of the month, the columns of the voucher register are footed. The total of the footings of the debit columns should be compared with the footing of the Vouchers Payable credit column to see that the debits and the credits in the voucher register are equal. Postings are then made as follows:

Credit: Vouchers Payable—column total.
Debits: Totals of all special debit columns.

Posting from the check register. At the end of the month, the columns of the check register are footed, and the total of the Vouchers Payable debit column is compared with the sum of the totals of the two credit columns (Discount on Purchases and Cash). Postings are then made as follows:

Debit: Vouchers Payable—column total.
Credits: Discount on Purchases—column total.
Cash—column total.

Use the letters *Ch R* in the ledger accounts to indicate postings from the check register.

Elimination of accounts payable ledger. When a voucher system is in use, a subsidiary ledger with accounts payable is not required; the individual liabilities at any date can be determined by merely noting the unpaid items in the voucher register. To illustrate, posting the totals of the Vouchers Payable column in the voucher register and the Vouchers Payable column in the check register will produce the following controlling account:

Vouchers Payable

19— Aug.	31	....	ChR1	10,013.00	19— Aug.	31	....	VR1	13,638.00

This account has a credit balance of $3,625.00. The individual liabilities making up this total are the items in the voucher register which have no notations in the Date Paid and the Check Number columns.

A schedule of the unpaid vouchers can be prepared as follows:

Schedule of Vouchers Payable
August 31, 19—

Voucher No.	Payee	Amount
11	George Martin........................	1,750.00
13	Dalton & Doane......................	1,875.00
	Total............................	3,625.00

Some companies like to be able to determine the purchases made from each creditor This can be done by keeping a file, with a card for each creditor, on which are listed the date and the number of each voucher payable to him Such a card might appear as follows

J B Henderson
1357 North Calumet Avenue
Chicago Illinois

Date	Vo No	Date	Vo No	Date	Vo No
Sep 15	135				
Sep 27	191				

This card can be referred to when it is desired to determine the numbers of the vouchers payable to each creditor, and the vouchers can be obtained from the file

Or, carbon copies of all vouchers may be made, and carbon copies of the vouchers payable to each payee may be filed together

Partial payments If, when an invoice is received, it is known that it will be paid in installments, a separate voucher should be made and recorded for each installment If installment payments are decided upon after one voucher for the entire invoice has been made and recorded, a new voucher for each installment must be prepared and recorded

To illustrate, assume that voucher number 200 was prepared on July 7 in the amount of $2,000 00, and recorded as shown in the voucher register on page 219 On July 20 it was decided to make an installment payment of $500 00 two new vouchers, numbers 255 and 256, were prepared and recorded in the register with a notation, "See voucher 200" in the Explanation column the credits were recorded in the Vouchers Payable column, the debit was also to the Vouchers Payable account, and it was entered in the Sundry Accounts debit section A notation, 'See 255 and 256' was made in the Date Paid and Check Number columns of the voucher register on the line for voucher 200, thus indicating how the liability on voucher 200 was cancelled A check (number 945) was drawn in payment of voucher 255 it was recorded in the check register, and the date of payment and the check number were recorded in the voucher register on the line for voucher 255

The voucher register and the check register are shown on page 219

Voucher Register

Voucher No.	Date		Payee	Explanation	Date Paid		Check No.	Credit Vouchers Payable	Debits: Purchases	Debits: Sundry Accounts: Name of Account	L.F.	Amount
	19—											
200	July	7	A. B. White....	Invoice, July 6	See	Vo.	255 & 256	2,000 00	2,000 00			
255	July	20	A. B. White. ...	See Voucher 200	July	20	915	500 00		Vouchers Payable....	11	2,000 00
256		20	A. B. White.......	See Voucher 200				1,500 00				

Check Register

Check No.	Date		Payee	Voucher No.	Debit Vouchers Payable	Credits: Discount on Purchases	Credits: Cash
	19—						
915	July	20	A. B. White....................................	255	500 00		500 00

Returned purchases and allowances. Assume that a purchase of merchandise costing $500.00 was made from Keith & Co. on November 5, and that voucher No. 2324 was prepared and recorded in the voucher register. Some of the merchandise was returned, and a credit memorandum (number 239) for $45 00 was received on November 9. A journal entry was made as follows:

Nov 9—Vouchers Payable (No 2324)	45 00	
Returned Purchases and Allowances		45 00
Credit memo No 239.		

This entry was posted to the two accounts affected in the general ledger. In addition, a memorandum notation was made in the Remarks column of the voucher register on the line for voucher 2324: "See journal entry for return, Nov. 9" Also, a notation was made on the face of the voucher, so that, when it is taken out of the tickler for payment, the cashier will draw a check *for only the net amount.*

If there are enough returns and allowances to warrant it, a returned purchases and allowances book may be used. The entry in such a book would be made as follows:

Returned Purchases and Allowances Book

Date		Name	Explanation	Voucher No	Amount
19— Nov	9	Keith & Co	Cr Memo 239	2324	45 00

Notations should be made in the Remarks column of the voucher register and on the face of the voucher, as described in connection with a journal entry.

Notes payable. Several methods are available for dealing with notes payable issued for merchandise or other purchases. The following method will usually be found satisfactory:

(1) Record the purchase in the usual way in the voucher register, debiting Purchases (or another appropriate account) and crediting Vouchers Payable.

(2) Make a journal entry for the issuance of the note, debiting Vouchers Payable and crediting Notes Payable. In the voucher register, indicate the issuance of the note by a memorandum, "Canceled by note," in the Check Number column.

(3) At the maturity of the note, make a new voucher and record it in the voucher register, debiting Notes Payable and crediting Vouchers Payable.

(4) Record the payment of the note by an entry in the check register, debiting Vouchers Payable and crediting Cash.

Journal entries charging Vouchers Payable should show the number of the voucher, thus:

Vouchers Payable (No. 3)
    Notes Payable

Exchange charges. If, at the time a voucher is drawn and recorded, it is known that the payment will be made by a bank draft or in some other manner which will involve an exchange charge, the voucher may be made for the full amount of the disbursement, including the exchange, and Collection and Exchange can be debited either in a special column of the voucher register or in the Sundry Accounts section.

If the exchange charge is not known until the disbursement is made, at some date after the recording of the voucher, an entry can be made in the journal, debiting Collection and Exchange and crediting Vouchers Payable. For instance:

> On June 10, merchandise was purchased for $500.00: voucher 27 was prepared, and an entry was made in the voucher register debiting Purchases and crediting Vouchers Payable.
>
> On June 25, a bank draft for $500.00 was purchased and mailed to the creditor; the bank draft was paid for by a check to the bank in the amount of $500.25, the $.25 being an exchange charge.
>
> An entry should be made in the journal as follows:

Collection and Exchange.........	.25	
Vouchers Payable—No. 27..		.25
Exchange charged by bank on bank draft for $500 00 purchased for payment of voucher 27.		

> And an entry should be made in the check register debiting Vouchers Payable and crediting Cash, $500.25.

If exchange charges are frequently incurred, the journal entry procedure just described can be avoided by providing a Collection and Exchange debit column in the check register.

CHAPTER 16

The Individual Proprietorship. The Partnership

Forms of business organization. The three most common forms of business organization are

The individual proprietorship
The partnership
The corporation

The asset, liability, income, and expense accounts of an individual proprietorship a partnership, and a corporation in the same line of business may be very similar The net worth accounts of a proprietorship and a partnership are similar to each other, but they differ from those of a corporation

Individual Proprietorships

Net worth accounts of a proprietorship In place of the Capital Stock, Surplus, and Dividends accounts kept by a corporation, the books of an individual proprietor contain the following accounts

Capital account
This account is credited with the proprietor's original investment, and with any additional investments

Drawing account
This account is debited with amounts withdrawn by the proprietor during the period

The following accounts are illustrative

James White, Capital

					19—				
					Jan.	1	Investment	CR1	7 500 00
					Feb	15	Additional investment	CR2	1 500 00

James White Drawings

19—									
Mar	25		CD 3	900 00					
July	8		CD 7	400 00					
Sept	5		CD 9	750 00					
Dec	17		CD12	600 00					

Closing the books The procedure of closing the income and expense accounts to Profit and Loss is exactly the same in an indi-

vidual proprietorship as in a corporation. Assume that the net profit for the year is $4,500.00: the Profit and Loss account is closed to the proprietor's Capital account, by an entry similar to the following:

Profit and Loss	4,500.00	
James White, Capital		4,500.00
To close the Profit and Loss account and transfer the net income for the year to the proprietor's Capital account.		

The closing procedure is completed by transferring the balance of the Drawings account to the Capital account, by an entry similar to the following:

James White, Capital	2,650.00	
James White, Drawings		2,650.00
To close.		

Proprietor's accounts after closing the books. After the books are closed, the Capital account and the Drawings account appear as follows:

James White, Capital

19—					19—				
Dec.	31	Drawings	J13	2,650 00	Jan.	1	Investment	CR 1	7,500 00
					Feb.	15	Additional investment	CR 2	1,500 00
					Dec.	31	Net profit	J12	4,500 00

James White, Drawings

19—					19—				
Mar.	25		CD 3	900 00	Dec.	31	To Capital	J13	2,650 00
July	8		CD 7	400 00					
Sept.	5		CD 9	750 00					
Dec.	17		CD12	600 00					
				2,650 00					2,650 00

Balancing the Capital account. The proprietor's Capital account may be balanced and ruled up to show the net worth at the end of the period, thus:

James White, Capital

19—					19—				
Dec.	31	Drawings	J13	2,650 00	Jan.	1	Investment	CR 1	7,500 00
	31	Balance		10,850 00	Feb.	15	Additional investment	CR 2	1,500 00
					Dec.	31	Net profit	J12	4,500 00
				13,500 00					13,500 00
					19—				
					Jan.	1	Balance		10,850 00

Working papers. The working papers of an individual proprietorship contain Trial Balance columns, Adjustment columns if required, Profit and Loss columns, and Balance Sheet columns. Instead of a pair of Surplus columns, the working papers of an individual proprietorship contain a pair of Capital columns.

The working papers on page 225 do not contain Adjustments columns, because it is assumed that no adjustments are to be made.

Statements. The profit and loss statement of an individual proprietorship does not necessarily differ from that of a corporation in the same line of business.

JAMES WHITE — Exhibit C

Statement of Profit and Loss
For the Year Ended December 31, 19—

Gross Sales		$48,000 00
Less Returned Sales and Allowances		1,000 00
Net Sales		$47,000 00
Less Cost of Goods Sold		
Purchases	$35,000 00	
Less Returned Purchases and Allowances	500 00	
Net Purchases	$34,500 00	
Less Inventory, December 31, 19—	4,000 00	
Cost of Goods Sold		30,500 00
Gross Profit on Sales		$16,500 00
Less Expense		12,000 00
Net Profit		$ 4,500 00

Instead of the surplus statement prepared for a corporation, a statement of the proprietor's capital is prepared.

JAMES WHITE — Exhibit B

Statement of Proprietor's Capital
For the Year Ended December 31, 19—

Investment, January 1, 19—		$ 7,500 00
Add		
Additional Investment	$1,500 00	
Net Profit for the Year—Exhibit C	4,500 00	6 000 00
Total		*$13,500 00*
Deduct Withdrawals		2,650 00
Balance, December 31, 19—		$10,850 00

The investment at the beginning of the year and the additional investments and drawings during the year were determined from the Capital and Drawings accounts

The balance sheets of an individual proprietorship and a corporation do not necessarily differ except in the net worth section. The balance sheet of an individual proprietorship shows the proprietor's

JAMES WHITE
Working Papers
Year Ended December 31, 19—

	Trial Balance		Profit and Loss Statement		Statement of Capital		Balance Sheet	
Cash	3,850.00						3,850.00	
Accounts Receivable	9,000.00						9,000.00	
Notes Receivable	2,000.00						2,000.00	
Accounts Payable		6,000.00						6,000.00
Notes Payable		2,000.00						2,000.00
Purchases	35,000.00		35,000.00					
Returned Purchases and Allowances		500.00		500.00				
Sales		48,000.00		48,000.00				
Returned Sales and Allowances	1,000.00		1,000.00					
Expense	12,000.00		12,000.00					
James White, Capital		9,000.00				9,000.00		
James White, Drawings	2,650.00				2,650.00			
	65,500.00	65,500.00						
Inventory, December 31, 19—				4,000.00			4,000.00	
Net Profit—to Capital			4,500.00			4,500.00		
			52,500.00	52,500.00				
Capital, December 31, 19—					10,850.00			10,850.00
					13,500.00	13,500.00	18,850.00	18,850.00

capital in one amount, whereas the balance sheet of a corporation shows the capital stock and surplus.

JAMES WHITE
Balance Sheet
December 31, 19--

Exhibit A

Assets		Liabilities and Net Worth	
Cash	$ 3,850 00	Liabilities	
Accounts Receivable	9,000 00	Accounts Payable	$ 6,000 00
Notes Receivable	2,000 00	Notes Payable	2,000 00
Merchandise Inventory	4,000 00	Total Liabilities	$ 8,000 00
		Net Worth	
		James White, Capital—Exhibit B	10,850 00
	$18 850 00		$18 850 00

The Partnership

Nature of a partnership. "A partnership," as defined by the Uniform Partnership Act, "is an association of two or more persons to carry on, as co-owners, a business for profit."

The partnership and the corporation are the two most common forms of organization by which two or more persons can join in a business enterprise. The partnership form is usually employed in comparatively small businesses requiring no more capital than can be contributed by a few partners, or in professional practices, such as law, medicine, and accounting, in which the relations of the firm to its clientele should involve a personal responsibility.

The partnership contract. The partnership relation is created by a contract, which should be in writing. Among the more important points to be covered by the contract, which is called the *articles of partnership*, are the following.

(1) The names of the partners and the name of the partnership.
(2) The date when the contract becomes effective.
(3) The nature and place of business.
(4) The capital to be contributed by each partner.
(5) The duties of each partner.
(6) The dates when the books are to be closed and the profits are to be divided.
(7) The portion of profits to be allotted to each partner.
(8) The drawings to be allowed each partner.
(9) The length of time the partnership is to continue, and the rights of the partners in the event the partnership is dissolved
(10) Provision for arbitration in the event of disputes.

Net worth accounts of a partnership. The net worth accounts of a partnership are similar to those of a single proprietorship.

A Capital account is kept with each partner and is credited with the amount of his original investment and with any additional investments.

It is extremely important that assets invested by partners be recorded at their fair values at the date of the investment. Assume, for instance, that a partner invests land and a building which he is carrying on his own books at $20,000.00, which was the cost to him less depreciation. At the date when he invests this property in the partnership, it is worth $25,000.00. If the property were recorded on the partnership books at $20,000.00 and later sold for $25,000.00, all the partners would share in the profit: this would not be fair to the partner who invested the property and who should have received a $25,000.00 capital credit for it.

A Drawings account is kept with each partner. As a general rule, all withdrawals made by a partner are charged to his Drawings account. However, partners sometimes agree that each partner may draw a stipulated amount each month as his share of the estimated profits, and that any drawings in excess of that amount shall be regarded as withdrawals of investments, and shall be charged to the Capital accounts.

When the books are closed, each partner's Capital account is credited with his share of the profit, or debited with his share of the loss.

The balance in each partner's Drawings account is transferred to his Capital account.

Each partner's Capital account may be balanced, and the balance brought down. (See illustration on page 223.)

Methods of dividing profits. The ratio in which partners divide their profits or losses is called the *profit and loss ratio.* If partners make no agreement regarding the division of profits and losses, the law assumes an agreement to divide them equally, regardless of any differences in capital contributions, time spent in the business, or business ability. If partners make an agreement regarding the division of profits, without any mention of losses, the agreed method for the division of profits applies also to the division of losses.

Partners may agree to divide profits and losses in various ways In this chapter we shall illustrate the following methods

(1) On a stated fractional basis
(2) In the ratio of the capitals at the beginning of the period
(3) In the average capital ratio
(4) Interest to the partners on their capital investments, and a division of the remainder in an agreed ratio
(5) Salaries to the partners, and a division of the remainder in an agreed ratio
(6) Salaries to the partners, interest on their capitals, and a division of the remainder in an agreed ratio

Basis of illustration The Capital and Drawings accounts of a partnership have the following balances at the end of the year

J L Lane Capital		\$10 000 00
J L Lane Drawings	\$3 000 00	
D K Burton Capital		19 000 00
D K Burton Drawings	4 000 00	

The income and expense accounts have been closed, and the Profit and Loss account has a credit balance of \$12,000 00, representing the net profit for the year

(1) Profits divided on a stated fractional basis To begin simply, assume that the profits are to be divided equally The entries to divide the profits and to close the Drawings accounts are as follows

Entry to divide the profits

Profit and Loss	12 000 00	
J L Lane Capital		6 000 00
D K Burton Capital		6 000 00
To divide the net income equally		

After this entry is posted the Profit and Loss account appears as follows

Profit and Loss

1948				1948			
Dec	31	Inventory 12/31/47	4 000 00	Dec	31	Sales	90 000 00
	31	Purchases	60 000 00		31	Inventory 12/31/48	5 000 00
	31	Selling expenses	13 000 00		31	Discount on purchases	700 00
	31	General expenses	6 500 00				
	31	Discount on sales	200 00				
	31	Distribution of net income					
		Lane	6 000 00				
		Burton	6 000 00				
			95 700 00				95 700 00

Entry to close the Drawings accounts:

J. L. Lane, Capital. . .	3,000.00	
J. L. Lane, Drawings		3,000.00
To close Lane's Drawings account.		
D. K. Burton, Capital	4,000.00	
D. K. Burton, Drawings		4,000.00
To close Burton's Drawings account.		

The entries closing the Drawings accounts will be omitted from the remaining illustrations.

As another illustration of the division of profits on a stated fractional basis, assume that the profits are to be divided in the ratio of 25% to Lane and 75% to Burton. The entry for the division of the profits is:

Profit and Loss . . .	12,000.00	
J. L. Lane, Capital		3,000.00
D. K. Burton, Capital		9,000.00
To divide the net income in the ratio of 25% and 75%.		

(2) *Division in the ratio of capitals at the beginning of the period.* If the profits are to be divided in the ratio of the capitals at the beginning of the period, it will be necessary to determine these capital balances by reference to the ledger accounts. The Capital accounts of the partners appear below:

J. L. Lane, Capital

1948				1948			
June	1		500.00	Jan.	1		10,000.00
Nov.	1		1,500.00	Aug.	1		2,000.00

D. K. Burton, Capital

1948				1948			
Apr.	1		1,000.00	Jan.	1		20,000.00
Dec.	1		2,000.00	July	1		2,000.00

These accounts show that Lane's capital balance on January 1 was $10,000.00 and Burton's balance was $20,000.00. Therefore, the profits are divided in the ratio of 1/3 and 2/3:

Profit and Loss.	12,000.00	
J. L. Lane, Capital		4,000.00
D. K. Burton, Capital . . .		8,000.00
To divide the net income in the ratio of the capitals at the beginning of the year.		

(3) *Division in the average capital ratio.* When profits are divided in a capital ratio, it is assumed that capital is the chief source of profit, and that the partners are therefore entitled to share the

profits in the ratio of the capital furnished. But Lane and Burton each contributed additional amounts of capital during the year; also, each partner made withdrawals in excess of the agreed drawings, and these excess withdrawals were regarded as withdrawals of capital and were charged to the Capital accounts Therefore, the capital investments at the beginning of the year did not represent the amounts of capital contributed by the partners for the use of the business during the year How can a partner's average investment for the year be computed?

Lane's Capital account contains the following debits and credits:

J L Lane, Capital

1948				1948			
June	1		500 00	Jan	1		10,000 00
Nov	1		1,500 00	Aug	1		2,000 00

The account had a balance of.

$10,000 00 for 5 months (Jan 1 to June 1)
9,500 00 for 2 months (June 1 to Aug 1)
11,500 00 for 3 months (Aug 1 to Nov 1)
10,000 00 for 2 months (Nov 1 to Dec 31),

From an interest standpoint

$10,000 00 for 5 months is equivalent to	$ 50,000 00	for 1	month
9,500 00 " 2 " " "	19,000 00	" 1	"
11,500 00 " 3 " " "	34,500 00	" 1	"
10,000 00 " 2 " " "	20 000 00	" 1	"

From an interest standpoint, therefore, Lane furnished the business with the equivalent of $123,500 00 for 1 month

Reduced to the basis of a year, this is the equivalent of $123,500 00 ÷ 12, or $10,291 67 for 1 year Lane's average investment for the year was therefore $10,291 67

Computation of Average Investments of Lane and Burton

	Date	Debits	Credits	Balance	*Months Unchanged*	*Equivalents for 1 Month*
J. L. Lane:	Jan 1		$10,000	$10 000	5	$ 50,000
	June 1	$ 500		9 500	2	19,000
	Aug 1		2,000	11,500	3	34,500
	Nov 1	1,500		10,000	2	20 000
	Total				12	$123,500
	Average for the year ($123,500 00 ÷ 12)					$ 10,292
D K. Burton:	Jan. 1		$20,000	$20,000	3	$ 60,000
	Apr 1	$1,000		19,000	3	57,000
	July 1		2,000	21,000	5	105 000
	Dec 1	2,000		19 000	1	19 000
	Total				12	$241,000
	Average for the year ($241,000 00 ÷ 12)					$ 20 083

Although it is necessary to divide $123,500.00 by 12 to determine Lane's average capital, and to divide $241,000.00 by 12 to determine Burton's average capital, it is not necessary to make these divisions to determine the *ratio* between the average capitals. The ratio of $123,500.00 to $241,000.00 is the same as the ratio of $10,292.00 to $20,083.00.

The ratios are therefore determined as follows:

	Equivalents for 1 Month	Ratio
Lane	$123,500	1235/3645
Burton	241,000	2410/3645
	$364,500	

The profits are divided in the average capital ratio by the following journal entry:

Profit and Loss	12,000.00	
J. L. Lane, Capital		4,065.84
D. K. Burton, Capital		7,934.16
To divide the net income in the average capital ratio: 1235/3645 to Lane, and 2410/3645 to Burton.		

If partners make investments or take withdrawals on dates other than the first of the month, the Capital account balances may be multiplied by the number of days these balances remained unchanged, as illustrated below:

	Date	Debits	Credits	Balance	Days Unchanged	Equivalents for 1 Day
F. S. Mason:	Dec. 31		$10,000	$10,000	73	$ 730,000
	Mar. 14	$500		9,500	134	1,273,000
	July 26		2,000	11,500	106	1,219,000
	Nov. 9		1,000	12,500	23	287,500
	Dec. 2	300		12,200	29	353,800
	Total				365	$3,863,300
W. B. Watson:	Dec. 31		$25,000	$25,000	129	$3,225,000
	May 9		2,000	27,000	26	702,000
	June 4	$800		26,200	75	1,965,000
	Aug. 18	400		25,800	66	1,702,800
	Oct. 23		1,500	27,300	69	1,883,700
	Total				365	$9,478,500

Partner	Ratio	Average Capital
F. S. Mason	38,633/133,418	$3,863,300 ÷ 365 = $10,584.38
W. B. Watson	94,785/133,418	9,478,500 ÷ 365 = 25,968.49

(4) *Interest on capitals, and balance arbitrarily.* Instead of dividing all the profits in the capital ratio or in the average capital ratio, it may be desired to divide a part of the profits on the basis of

capital invested (by allowing interest on capitals) and to divide the remainder in some other ratio. Two illustrations are given below.

(a) Interest at 6% is allowed each partner on his investment at the beginning of the year, and the remaining net income is divided equally.

Profit and Loss	1,800 00	
J L Lane, Capital		600 00
D K Burton, Capital		1,200 00
To allow interest on opening capitals Lane 6% on $10,000 = $ 600 *Burton 6% on $20,000 = $1,200*		
Profit and Loss	10,200 00	
J L Lane, Capital		5,100 00
D K Burton, Capital		*5,100 00*
To divide the remaining net income equally		

(b) Interest at 6% is allowed each partner on his average capital, and the remaining net income is divided equally. (The average capitals were computed on page 230).

Profit and Loss	*1,822 50*	
J L Lane, Capital		617 50
D K Burton, Capital		1,205 00
To allow 6% interest on Lane s average capital of $10,291 67, and on Burton's average capital of $20,083 33		
Profit and Loss	10,177 50	
J L Lane, Capital		5,088 75
D K Burton Capital		5,088 75
To divide the remaining net income equally		

(5) *Salaries to partners and an arbitrary division of the remainder* Partners have no right to salaries unless they are agreed upon, even though one partner may devote all his time to the business and the other may devote little or none. But partners may agree to divide the profits first by allowing themselves salaries and then dividing the remaining profits. The remaining profits may be divided equally or in any other ratio to which the partners agree. One illustration will be sufficient· salaries and an equal division of the remainder.

For purposes of illustration, assume that Lane is allowed a salary of $3,600.00 a year, and Burton is allowed a salary of $4,800.00. They are permitted to draw such amounts during the year as they desire, and at the end of the year their salaries are to be credited to them. The following entries will be made:

Profit and Loss	8,400 00	
J L Lane, Capital		3,600 00
D K Burton, Capital		4,800 00
To credit the partners with their agreed salaries		

Profit and Loss	3,600.00	
J. L. Lane, Capital		1,800.00
D. K. Burton, Capital		1,800.00
To divide the remaining net income equally.		

(6) *Salaries, interest, and remainder.* Assume that Lane and Burton agreed to make the following division of their profits:

Salaries:
- Lane ... $3,600.00
- Burton ... 4,800.00

Interest on capitals—6% on January 1 balances. Remainder—equally.

The following are the entries to close the Profit and Loss account:

Profit and Loss	8,100.00	
J. L. Lane, Capital		3,600.00
D. K. Burton, Capital		4,800.00
To credit the partners with their agreed salaries		
Profit and Loss	1,800.00	
J. L. Lane, Capital		600.00
D. K. Burton, Capital		1,200.00
To credit the partners with 6% interest on their capitals at January 1: Lane —6% of $10,000.00 Burton—6% of $20,000.00		
Profit and Loss	1,800.00	
J. L. Lane, Capital		900.00
D. K. Burton, Capital		900.00
To divide the remaining net income equally.		

After the foregoing entries are posted, the Profit and Loss account appears as follows:

Profit and Loss

1948				1948			
Dec.	31	Inventory, 12/31/47	4,000.00	Dec.	31	Sales	90,000.00
	31	Purchases	60,000.00		31	Inventory, 12/31/48	5,000.00
	31	Selling expenses	13,000.00		31	Discount on purchases	700.00
	31	General expenses	6,500.00				
	31	Discount on sales	200.00				
		Distribution of net income:					
	31	Salaries:					
		Lane	3,600.00				
		Burton	4,800.00				
	31	Interest on capital:					
		Lane	600.00				
		Burton	1,200.00				
	31	Remainder equally:					
		Lane	900.00				
		Burton	900.00				
			95,700.00				95,700.00

The credits for salary, interest, and remaining profit should be shown in the Capital accounts as follows

J L Lane, Capital

19—					19—				
June	1			500 00	Jan	1			10 000 00
Nov	1			1 500 00	Aug	1			2 000 00
					Dec	31	Share of profit		
							Salary	J3	3 600 00
							Interest on capital	J3	600 00
							Balance—½	J3	900 00

Interest and/or salaries in excess of profits The salaries and interest in the preceding illustration totaled $10 200 00 Suppose the net income was only $9,000 00, how should it be divided?

The entries for the salaries and the interest must be made in accordance with the agreement, thus

Profit and Loss	8 400 00	
J L Lane Capital		3 600 00
D K Burton Capital		4 800.00
To credit the partners with their agreed salaries.		
Profit and Loss	1 800 00	
J L Lane, Capital		600 00
D K Burton Capital		1,200 00
To credit the partners with 6% interest on their capitals		

After these entries are posted, the Profit and Loss account will have a debit balance of $1,200 00 because the salaries and interest totaled $10,200 00 whereas the net income was only $9 000 00 Because the partners agreed to an equal division of the balance after salaries and interest, the $1,200 00 debit balance in the Profit and Loss account will be divided equally by the following entry

J L Lane Capital	600 00	
D K Burton Capital	600 00	
Profit and Loss		1 200 00
To divide the debit balance in the Profit and Loss account equally as agreed		

These entries divide the $9,000 00 net income between the partners, as follows

	Lane	Burton	Total
Credits			
Salaries	$3 600 00	$4 800 00	$ 8 400 00
Interest on capital	600 00	1 200 00	1 800 00
Total credits	$4 200 00	$6 000 00	$10 200 00
Less debit for remainder	600 00	600 00	1 200 00
Distribution of net income	$3 600 00	$5 400 00	$ 9 000 00

If partners' salaries and interest on their capitals are agreed upon, entries therefor must be made even though the operations of the business result in a loss. For instance, assume that the operations result in a loss of $5,000.00, and that salaries and interest are to be allowed as in the preceding illustration: the credits to the partners for salaries and interest, and the debits to them for the final balance of the Profit and Loss account, will be as indicated in the following tabulation:

	Lane	Burton	Total
Credits to partners:			
Salaries	$3,600.00	$4,800.00	$ 8,400.00
Interest on capital	600 00	1,200.00	1,800.00
Total credits to partners for salaries and interest	$4,200.00	$6,000.00	
Offsetting debit to Profit and Loss			$10,200.00
Net loss			5,000.00
Debit balance in Profit and Loss			$15,200.00
Debits to partners to close Profit and Loss	7,600.00	7,600.00	
Net debits to partners—equal to net loss	$3,400 00	$1,600.00	

The journal entries to close the Profit and Loss account are as follows:

	Debit	Credit
Profit and Loss	8,400 00	
J. L. Lane, Capital		3,600.00
D. K. Burton, Capital		4,800.00
To credit the partners with their agreed salaries.		
Profit and Loss	1,800.00	
J. L. Lane, Capital		600.00
D. K. Burton, Capital		1,200.00
To credit the partners with 6% interest on their capitals.		
J. L. Lane, Capital	7,600.00	
D. K. Burton, Capital	7,600.00	
Profit and Loss		15,200.00
To divide the debit balance in the Profit and Loss account equally, as agreed.		

Details are shown in the Profit and Loss account as follows:

Profit and Loss

1948			1948		
Dec. 31	Net loss	5,000 00	Dec. 31	Loss plus salaries and interest:	
31	Salaries:			Lane ½	7,600 00
	Lane	3,600 00		Burton ½	7,600 00
	Burton	1,800 00			
31	Interest:				
	Lane	600 00			
	Burton	1,200 00			
		15,200 00			15,200 00

The credits for salary and interest and the debits for loss plus salaries and interest are shown in the Capital accounts as follows

J L. Lane, Capital

1948					1948				
June	1			500 00	Jan.	1			10 000 00
Nov	1			1 500 00	Aug	1			2 000 00
Dec	31	Loss plus salaries and interest—½		7 600 00	Dec	31	Salary		3 600 00
						31	Interest		600 00

CHAPTER 17

The Partnership (Concluded)

Profit and loss statement. The profit and loss statement of a partnership will be similar to that of an individual proprietorship or a corporation in the same line of business. The profit and loss statement of Lane and Burton (continuing the illustrations in the preceding chapter) appears below:

Exhibit C

LANE AND BURTON
Statement of Profit and Loss
For the Year Ended December 31, 1948

Sales		$90,000.00
Less Cost of Goods Sold:		
Inventory at the Beginning of the Year	$ 4,000.00	
Purchases	60,000.00	
Total	$64,000.00	
Less Inventory at the End of the Year	5,000.00	
Cost of Goods Sold		59,000.00
Gross Profit on Sales		$31,000.00
Less Selling Expenses (detailed)		13,000.00
Net Profit on Sales		$18,000.00
Less General Expenses (detailed)		6,500.00
Net Profit on Operations		$11,500.00
Add Discount on Purchases		700.00
Net Profit on Operations, and Other Income		$12,200.00
Deduct Discount on Sales		200.00
Net Income		$12,000.00

Working papers. The working papers of a partnership contain a pair of columns for each partner, as shown in the illustrations on pages 238 and 239.

The working papers on page 238 show the division of the $12,000.00 net income equally, as in illustration 1, on page 228.

The working papers on page 239 show the division of the net income in accordance with illustration 6, on page 233, as follows:

Salaries to partners.
Interest on capitals at the beginning of the year.
Balance equally.

Statement of partners' capitals. In order to prepare the statement of partners' capitals on page 240, it was necessary to refer to the Capital accounts (page 229) to determine the capital balances at the beginning of the year and the additional investments during the year. The withdrawals shown in the statement include those

LANE AND BURTON
Working Papers
Year Ended December 31, 1948

	Trial Balance		Profit and Loss Statement		J L Lane, Capital		D K Burton, Capital		Balance Sheet	
Cash	17,000 00								17,000 00	
Accounts Receivable	15,000 00								15,000 00	
Inventory (December 31, 1947)	4,000 00		4,000 00							
Accounts Payable		3,000 00								3,000 00
J L Lane, Capital		10,000 00				10 000 00				
J L Lane, Drawings	3,000 00				3,000 00					
D K Burton, Capital		19,000 00						19 000 00		
D K Burton, Drawings	4,000 00						4,000 00			
Purchases	60,000 00		60 000 00							
Sales		90,000 00		90,000 00						
Selling Expenses	13 000 00		13 000 00							
General Expenses	6 500 00		6,500 00							
Discount on Sales	200 00		200 00							
Discount on Purchases		700 00		700 00						
	122 700 00	122,700 00								
Inventory, December 31, 1948				5 000 00					5,000 00	
Net Income—Divided equally			12,000 00			6,000 00		6,000 00		
			95,700 00	95 700 00						
Capitals at the end of the year										
Lane					13,000 00					13,000 00
Burton							21,000 00			21,000 00
					16 000 00	16 000 00	25 000 00	25 000 00	37,000 00	37 000 00

LANE AND BURTON
Working Papers
Year Ended December 31, 1948

	Trial Balance		Profit and Loss Statement		J. L. Lane, Capital		D. K. Burton, Capital		Balance Sheet	
Cash	17,000								17,000	
Accounts Receivable	15,000								15,000	
Inventory (December 31, 1947)	4,000		4,000							
Accounts Payable		3,000								3,000
J. L. Lane, Capital		10,000				10,000				
J. L. Lane, Drawings	3,000				3,000					
D. K. Burton, Capital		19,000						19,000		
D. K. Burton, Drawings	4,000						4,000			
Purchases	60,000		60,000							
Sales		90,000		90,000						
Selling Expenses	13,000		13,000							
General Expenses	6,500		6,500							
Discount on Sales	200		200							
Discount on Purchases		700		700						
	122,700	122,700								
Inventory, December 31, 1948				5,000					5,000	
Net Income			12,000							
Divided as follows:										
Salaries						3,000		4,800		
Interest on Capital						600		1,200		
Balance Equally						900		900		
			95,700	95,700						
Capitals at the End of the Year:										
Lane					12,100					12,100
Burton							21,000			21,000
					15,100	15,100	25,000	25,000	37,000	37,000

charged to the Capital accounts as well as those charged to the Drawing accounts The profits are divided equally, as in the working papers on page 238

LANE AND BURTON Exhibit B

Statement of Partners Capitals
For the Year Ended December 31 1948

	J L Lane	D K Burton	Total
Balances January 1 1948	$10 000 00	$20 000 00	$30 000 00
Add			
Additional Investments	2 000 00	2 000 00	4 000 00
Net Income for the Year (Exhibit C)	6 000 00	6 000 00	12 000 00
Total	$18 000 00	$28 000 00	$46 000 00
Deduct Withdrawals	5 000 00	7 000 00	12 000 00
Balances December 31 1948	$13 000 00	$21 000 00	$34 000 00

In the following statement the profits are divided as in the working papers on page 239

LANE AND BURTON Exhibit B

Statement of Partners Capitals
For the Year Ended December 31 1948

	J L Lane	D K Burton	Total
Balances January 1 1948	$10 000 00	$20 000 00	$30 000 00
Add			
Additional Investments	2 000 00	2 000 00	4 000 00
Net Income for the Year (Exhibit C)			
Salaries	3 600 00	4 800 00	8 400 00
Interest on Capital	600 00	1 200 00	1 800 00
Remainder Equally	900 00	900 00	1 800 00
Total	$17 100 00	$28 900 00	$46 000 00
Deduct Withdrawals	5 000 00	7 000 00	12 000 00
Balances December 31 1948	$12 100 00	$21 900 00	$34 000 00

Partnership balance sheet The balance sheet of a partnership usually shows the capital of each partner with a reference to the statement of partners capitals, where details can be found

LANE AND BURTON
Balance Sheet
December 31 1948

Assets		Liabilities and Net Worth		
Cash	$17 000 00	Liabilities		
Accounts Receivable	15 000 00	Accounts Payable		$ 3 000 00
Merchandise Inventory	5 000 00			
		Net Worth—Exhibit B		
		J L Lane	$12 100 00	
		D K Burton	21 900 00	34 000 00
	$37 000 00			$37 000 00

Changes in Personnel

Changes cause dissolution. Changes in the personnel of a partnership may be caused by the death or retirement of a partner, or by the admission of a new partner. The retirement of a partner or the admission of a new partner requires the consent of all partners.

Any change in the personnel of a partnership causes a dissolution of the partnership; the old articles of partnership are no longer in effect, and new articles of partnership should be drawn up and signed. It is particularly important to realize that the old agreement as to the division of profits is no longer in effect, and that, unless a new agreement is reached, the profits and losses of the new partnership will legally be divisible equally. For instance, if *A*, *B*, and *C* shared profits in the ratio of 60, 25, and 15, and *C* died, it would be necessary for *A* and *B* (if they continued the business as a new partnership) to make a new agreement as to the sharing of profits; in the absence of an agreement, the profits would legally be divisible equally.

Adjustment of the accounts. Before a change in personnel is recorded, the first of the following steps should usually be taken, and the second step may also be required:

(1) Close the books, crediting each old partner with his share of the profit (or debiting him with his share of the loss), and transferring the balances of the Drawings accounts to the respective Capital accounts.

(2) Make entries to adjust the asset valuations in accordance with any agreements with respect thereto. Asset valuations which are proper from the standpoint of a going concern may not be proper valuations to be used when changes occur in partners' interests. For instance, from the standpoint of a going concern, the proper valuation of a fixed asset is cost less depreciation: but if a partner is withdrawing or a new partner is being admitted, equity requires that recognition be given to the market value of the fixed assets at the date of the change in personnel.

Any gains or losses reflected by such adjustments should be divided among all persons who were partners before the change in personnel, in their profit and loss ratio.

For example, assume that a change is to occur in the personnel of the partnership of *A*, *B*, and *C*, who share profits and losses equally, and that the following adjustments of asset valuations have been agreed upon:

Increase in Land account.......... ..	$5,000.00
Increase in Building account...	8,000.00
Increase in Reserve for Bad Debts.....	1,000.00

The adjustments are made by the following journal entry

Land	5,000 00	
Building	8 000 00	
Reserve for Bad Debts		1 000 00
A Capital		4,000 00
B Capital		4,000 00
C Capital		4,000 00
To adjust the asset valuations in accordance with the agreement, crediting the partners in their profit and loss ratio		

If numerous adjusting entries are made, the gain or loss shown by each entry may be credited or debited to a Capital Adjustment account and the final balance of this account will be closed to the partners Capital accounts

Death of a partner When a partner dies, the following matters require special consideration.

(1) *Closing the books* Unless the articles of partnership contain some provision for postponing the closing of the books, they should be closed as of the date of the deceased partner's death

The articles of partnership may contain an agreement of some kind to avoid the necessity of taking an inventory and closing the books at the date of the deceased partner s death For instance, the articles may provide that the books shall not be closed until the customary annual closing date and that the deceased partner s share of profits shall be computed by determining the amount of profit to which the deceased partner would have been entitled if he had lived to the end of the year, and multiplying this amount by a fraction representing the portion of the year prior to his death To illustrate, assume that such an agreement was included in the articles of partnership of *A*, *B*, and *C*, who shared profits equally, that *A* died on March 31 that the books were closed on December 31 and that the net profit for the year was found to be $12 000 00 If *A* had lived until the end of the year he would have been entitled to $4,000 00 of the profit, since he lived only three months of the year, his share of the profit was one fourth of $4 000 00, or $1 000 00 If the payment of *A*'s capital is postponed until the end of the year, an entry should be made transferring his Capital account credit to an account called *A*, Personal because *A* is no longer a partner

(2) *Valuation of assets* Although going concern valuations may not be equitable in connection with the admission or retirement of a partner the representative of a deceased partner has no right to insist on adjustments of asset valuations unless the articles of partnership provide therefor

(3) *Goodwill.* If a business has enjoyed exceptionally good earnings, it may have a goodwill. The partnership articles may contain a provision that, in the event of the death of a partner, the goodwill value shall be computed (by a method agreed upon in the articles), and that the deceased partner's Capital account shall be credited with his share thereof, determined by multiplying the total goodwill value by the deceased partner's profit and loss per cent. For instance, if the goodwill is valued at $15,000.00, and the profits are divided equally among three partners, *A*, *B*, and *C*, the share allowed to *A* upon his death would be recorded as follows:

Goodwill	5,000 00	
A, Capital. . .		5,000.00
To credit *A*'s account with his share of the partnership goodwill.		

The entire goodwill might be placed on the books thus:

Goodwill . .	15,000.00	
A, Capital.		5,000 00
B, Capital		5,000 00
C, Capital .		5,000 00
To record the goodwill of the business by credits to the partners in their profit and loss ratio.		

However, it is not considered good accounting to charge a Goodwill account with an amount in excess of the amount paid for goodwill: to do so would be a violation of the cost principle. Since the business pays *A*'s estate for his share of the goodwill, but does not pay *B* and *C* for their shares, it is preferable to record the goodwill by the first entry shown above.

A deceased partner's estate is not entitled to any payment for goodwill unless the partnership agreement provides for it; of course, the surviving partners may voluntarily make such a payment although not obliged to do so.

(4) *Terms of payment.* The immediate payment of the entire capital interest of a deceased partner might deplete the current assets of a business and seriously handicap it in its operations. Partners sometimes provide against such a contingency by carrying insurance on the lives of the partners, the firm being named as beneficiary; the collection of the insurance provides funds with which to make settlement with the deceased partner's estate.

The articles of partnership may contain a provision that payments shall be made in installments: in the absence of such a provision, the surviving partners and the estate may reach such an agreement. Any balance in the deceased partner's Capital account not immediately paid, should be transferred to an account payable or note payable account.

Retirement of a partner. Following is an outline of the cases to be presented illustrating the withdrawal of a partner

(1) A partner's interest is purchased
  (a) By another partner
  (b) By an outsider
(2) A partner is paid from partnership assets
  (a) An amount equal to his capital
  (b) An amount in excess of his capital
  (c) An amount less than his capital

In all these cases it is assumed that there are three partners (*A*, *B*, and *C*), sharing profits and losses equally, that *A* is to withdraw, that his Capital account balance is $10,000 00, and that all partners have agreed to the retirement of *A* and the method of effecting it

Case 1-a In this case it is assumed that *B* is to purchase *A*'s interest in the firm The price paid by *B* to *A* is a private matter between *B* and *A* it may be $10 000 00 or more or less than that amount Regardless of the price paid by *B* to *A*, the entry on the partnership books is

A, Capital	10 000 00	
B Capital		10 000 00
To record *B*s purchase of *A*s capital interest in the firm, and the withdrawal of *A*		

Case 1-b In this case it is assumed that an outsider, *D*, purchases *A*'s interest Again the price paid is a private matter between these two parties and is not recorded on the firm s books Regardless of the price paid, the entry to record the retirement of *A* and the admission of *D* is

A, Capital	10 000 00	
D Capital		10 000 00
To record the retirement of *A* and the admission of *D* to the partnership *D* having purchased *A*s interest.		

Case 2-a In this case it is assumed that *A* is paid, out of partnership cash, the amount at the credit of his Capital account The entry to record his retirement is

A Capital	10 000 00	
Cash		10 000 00
To record the retirement of *A*		

Case 2-b In this case it is assumed that *A* is paid $12 000 00 from partnership funds There are two methods of recording this withdrawal, depending upon whether the $2 000 00 excess of the payment over *A*'s capital is regarded as showing the existence of goodwill, or is regarded as a bonus to *A*

If the $2 000 00 excess is regarded as a payment for *A*'s share of the goodwill of the business, the entries on the following page will be made

Goodwill	2,000 00	
A, Capital		2,000 00
To credit *A* with his one third of the goodwill of the partnership.		
A, Capital	12,000 00	
Cash		12,000 00
To record the retirement of *A*.		

If the $2,000 00 excess is regarded as a bonus paid by *B* and *C* to *A*, the bonus is chargeable to *B* and *C* in their profit and loss ratio, and the following entry will be made:

A, Capital	10,000 00	
B, Capital	1,000 00	
C, Capital	1,000 00	
Cash		12,000 00
To record the retirement of *A*.		

Case 2-c. If the payment to *A* is less than the amount at the credit of his Capital account, *the excess of A's capital over the amount paid to him is* credited to the other two partners in their profit and loss ratio, as follows:

A, Capital	10,000 00	
B, Capital		1,000 00
C, Capital		1,000 00
Cash		8,000 00
A, upon retirement, accepts $8,000 00 in settlement of his capital credit of $10,000 00.		

Admission of a partner by purchase. A new partner may be admitted to the firm by purchasing the interest of an old partner, or he may be admitted by purchasing portions of the interests of two or more partners.

The preceding Case 1-b illustrated the entry to be made if a new partner purchases all the interest of an old partner.

As another illustration, assume that three partners had Capital account balances as follows:

E	$10,000 00
F	15,000 00
G	20,000 00

H purchases one quarter of the capital interest of each partner. *H*'s payment goes to *E*, *F*, and *G* personally, and not into the firm's cash; the prices paid are not recorded on the firm's books; and the entry for *H*'s admission is:

E, Capital	2,500 00	
F, Capital	3,750 00	
G, Capital	5,000 00	
H, Capital		11,250 00
Admission of *H* by purchase of one fourth of capital of each former partner.		

Admission of a partner by investment. If a new partner makes an investment in the firm, the partnership acquires additional assets. Assume that *X* and *Y* are in partnership and that *Z* is admitted, with a cash investment of $10,000.00; the entry to record *Z*'s investment would usually be as follows:

Cash	10,000 00	
Z, Capital		10,000 00
To record Z's investment		

Sometimes an incoming partner is credited with more or less than the amount of his investment The accounting procedures applicable in such instances are discussed in *Principles of Accounting, Intermediate.*

Liquidation of the Partnership

A partnership is *terminated* whenever there is any change in the personnel, the change in personnel creates a new partnership.

A partnership is *liquidated* when the business is discontinued or the assets are transferred to other parties.

Basis of illustration of liquidation. Assume the following balance sheet of a partnership·

A* AND *B
Balance Sheet
October 31, 19—

Assets			Liabilities and Net Worth	
Cash		$ 5,000	Accounts Payable	$ 9,000
Accounts Receivable	$25,000		*A*, Loan	5,000
Less Reserve for Bad Debts	1,000	24,000	*A*, Capital	25,000
			B, Capital	20,000
Inventory		30 000		
		$59 000		$59,000

In addition to investing $25,000 00, *A* has loaned the business $5,000 00.

Disposal of assets. Assume that *X* desires to acquire the business of *A* and *B*, and that the partners sell their inventory and accounts receivable to *X* for $52,000 00. *A* and *B* retain the $5,000 00 of cash shown in the foregoing balance sheet and are to pay the $9,000.00 of accounts payable. The sale of the inventory and receivables will be recorded as follows:

X	52,000 00	
Loss on Sale of Business	2,000 00	
Reserve for Bad Debts	1,000 00	
Inventory		30 000 00
Accounts Receivable		25,000 00
To record the sale of the assets to *X*.		

Cash	52,000.00	
X		52,000.00
To record collection for assets sold.		

Division of the profit or loss. Any profit or loss on the disposal of the assets should *always* be divided between the partners before any cash distribution is made to them, because the amounts of cash to which the partners are entitled cannot be determined until their shares of the profit or loss have been credited or charged to them. The profit or loss should be divided between the partners in their profit and loss ratio. Assuming that *A* and *B* share profits equally, the \$2,000.00 loss on the sale of the assets to *X* will be divided by the following entry:

A, Capital	1,000.00	
B, Capital	1,000.00	
Loss on Sale of Business		2,000.00

Distribution of funds. After the disposal of the inventory and the receivables, the collection of the cash, and the division of the loss between the partners, the balance sheet of the business is as follows:

A AND *B*
Balance Sheet
November 3, 19—

Assets		Liabilities and Net Worth	
Cash	\$57,000.00	Accounts Payable	\$ 9,000.00
		A, Loan	5,000.00
		A, Capital	24,000.00
		B, Capital	19,000.00
	\$57,000.00		\$57,000.00

The distribution of cash should be made in the following order:

(1) In payment of liabilities to outside creditors:

Accounts Payable	9,000.00	
Cash		9,000.00

(2) In payment of partner's loan:

A, Loan	5,000.00	
Cash		5,000.00

(3) In payment of partners' capitals:

A, Capital	24,000.00	
B, Capital	19,000.00	
Cash		43,000.00

Partner with a debit balance. It sometimes happens that a partner has a debit balance in his Capital account as a result of operating losses, drawings, and losses on the disposal of assets during

the liquidation of the business Three illustrative cases are presented

Case 1 Assume that, after the sale of all assets and the payment of liabilities, the trial balance of a partnership ledger shows the following balances

Cash	20 000 00	
M, Capital	5 000 00	
N, Capital		25 000 00
	25 000 00	25 000 00

The entire cash balance should be paid to *N* this payment would reduce his capital credit to \$5 000 00 He has a right to collect \$5,000 00 from *M*

Case 2 Assume that, after the sale of all assets and the payment of liabilities to outside creditors, the trial balance of a partnership ledger shows the following balances

Cash	25 000 00	
O Capital	2,000 00	
O, Loan		3 000 00
P, Capital		24 000 00
	27 000 00	27 000 00

Enough of the credit in *O*'s Loan account should be transferred to his Capital account to make good the debit balance in his Capital account, this is accomplished by the following entry

O Loan	2 000 00	
O, Capital		2,000 00
To apply the right of offset by transferring \$2 000 00 of O s loan to his capital		

The payments to partners will then be made as indicated by the following entries

O, Loan	1,000 00	
Cash		1 000 00
To record the payment of *O* s loan.		
P, Capital	24 000 00	
Cash		24 000 00
To record the payment of *P* s capital		

Case 3 In this case it is assumed that, after the sale of all assets and the payment of all liabilities, a partnership s trial balance appears as follows

Cash	20 000 00	
R Capital	5 000 00	
S Capital		15 000 00
T, Capital		10 000 00
	25 000 00	25 000 00

Profits and losses were divided as follows: *R*, 20%; *S*, 40%; *T*, 40%.

R should pay $5,000.00 cash into the partnership to make good the debit balance in his Capital account: if he does so, there will be $25,000.00 cash on hand, which will be sufficient to pay *S* and *T* in full.

But suppose that it is desired to distribute the $20,000.00 of cash on hand to *S* and *T* before it is known whether or not *R* will pay in the $5,000.00. In determining how to divide the cash between *S* and *T*, we should remember that, if *R* fails to pay in the $5,000.00, this loss will have to be borne by *S* and *T* in their profit and loss ratio. In the past, *S* and *T* each had 40% of the profits or losses; that is to say, their shares of profits or losses were equal. Therefore, if *R* should fail to pay in the $5,000.00, *S* and *T* would share the loss equally. Accordingly, they should be paid *down to* $2,500.00 each. The entry to record the payment is:

S, Capital	12,500 00	
T, Capital	7,500 00	
Cash		20,000 00
To record the distribution of cash to *S* and *T*.		

The resulting trial balance will be:

R, Capital	5,000 00	
S, Capital		2,500 00
T, Capital		2,500 00
	5,000 00	5,000 00

CHAPTER 18

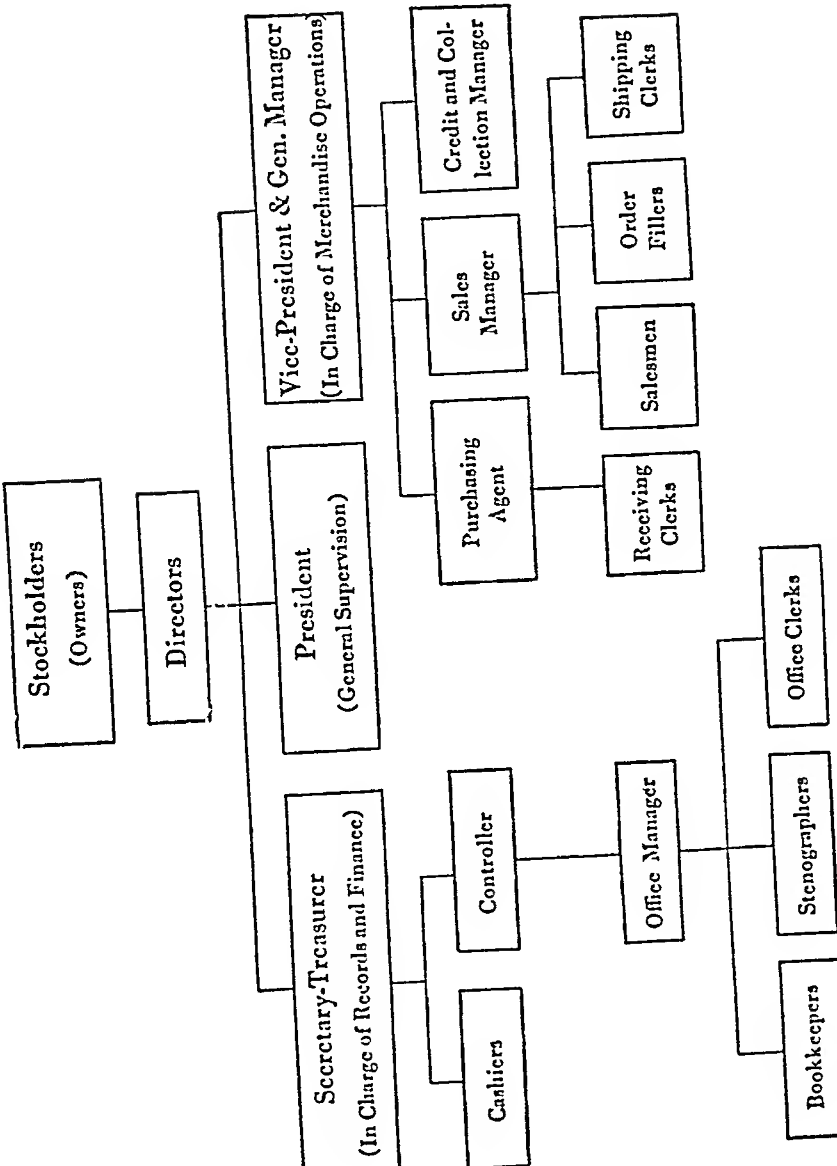
The Corporation

Definition. Probably the most famous definition of the corporation is the one given in 1819 by Chief Justice Marshall in the Dartmouth College case decision, in which he described a corporation as "an artificial being, invisible, intangible, and existing only in contemplation of law" This definition emphasizes one of the chief characteristics of the corporation, namely, its separate entity. Certain other characteristics are mentioned in the following definition quoted from the Standard Dictionary "A corporation is an artificial person created by law, consisting of one or more natural persons united in one body under such grants as secure a succession of members without changing the identity of the body, and empowered to act in a certain capacity or to transact business of some designated form or nature like a natural person"

Corporate management If a business is organized as a corporation, the stockholders are its owners, but they have no authority to transact its business The stockholders elect directors, to whom the general management of the business is committed In most states, a person cannot serve as a director of a corporation unless he is one of its stockholders

Although the directors are charged with responsibility for the general management of the business, their duties are to a considerable extent supervisory, since most of the detailed work of management is performed by officers elected by them The officers usually include a president, a vice-president, a secretary, and a treasurer Sometimes one individual holds more than one office, for instance, one person may be secretary and treasurer On the other hand, there may be several vice presidents, an assistant secretary, and an assistant treasurer The president usually is the ranking officer, but in some corporations there is an officer called the *chairman of the board*, whose rank is superior to that of the president The secretary is the official custodian of the corporate records and seal The treasurer is the chief financial officer

Although the officers have general control over the various functions of the business, other employees are charged with the responsibility of performing much of the detailed work The kinds and number of employees differ in every business, and it therefore is impossible to draw up a standard personnel chart, the chart on page 251 is merely one illustration of the flow of authority



Personnel Chart

Organization of a corporation If a corporation is to be organized, an attorney should be consulted, because the laws of the various states differ regarding the rights and duties of corporations organized under their laws and the procedure for organizing corporations Since the procedure differs in the various states, and since the organization of corporations is the work of an attorney rather than that of an accountant, the subject will not be discussed in detail here

In general, and subject to the exceptions incident to the diversity of laws, the organization of a corporation involves steps somewhat as follows

(1) An application, signed by a required number of incorporators, is filed with a designated state officer This application states among other things
   (a) The name of the corporation
   (b) The nature of the business which it is desired to conduct
   (c) The amount of the authorized capital stock, and the number of shares into which it is to be divided
   (d) The names and the addresses of the original subscribers to the stock
   (e) The assets paid into the corporation by these subscribers
(2) If the application is approved, a charter (which is often the approved application itself) is received from the state officer with whom the application was originally filed This charter evidences the fact that the corporation has been organized and is authorized to conduct business
(3) A meeting of the incorporators (or stockholders) is held for the purpose (among other things) of electing directors
(4) A meeting of the directors is held, and officers are elected
(5) Capital stock certificates are issued to the stockholders

Stock certificates Investments in the capital stock of a corporation are evidenced by stock certificates Blank stock certificates are bound in books with stubs, like check books The stock certificate shown on page 253, which is still attached to its stub, has been filled out for issuance to George Tuttle, as evidence of his investment of $800 00 in The Marquis Corporation

The certificate has been signed by the secretary and the president of the corporation, and is ready to be detached, stamped with the corporation's seal, and given to Tuttle The stub, which will remain in the certificate book, shows the essential facts about the certificate

Certificate No. 3

For 8 Shares

Issued to

George Tuttle

Transferred from

Original

Date July 1 19--

Original Certificate No	Number of Original Shares	Number of Shares Transferred

Certificate No. 3 8 Shares

CAPITAL STOCK $5,000.00
50 Shares of $100.00 Par Value

THIS CERTIFIES That George Tuttle is the owner of Eight Shares of the Capital Stock of

THE MARQUIS CORPORATION

transferable only on the books of the Corporation by the holder hereof in person or by attorney upon the surrender of this Certificate properly endorsed.

IN WITNESS WHEREOF, the said Corporation has caused this Certificate to be signed by its duly authorized officers, and to be sealed with the seal of the Corporation at Chicago, Illinois this 1st day of July, 19 ——

J. K. Patterson
Secretary

J. E. White
President

Stock Certificate with Stub

The important facts shown by the certificate and the stub are

	Shown by Certificate	Shown by Stub
Certificate No	3	3
Number of shares	8	8
Authorized capital	$5,000 00	
Number of authorized shares	*50*	
Par value per share	$100 00	
Issued to	George Tuttle	George Tuttle
Name of corporation	The Marquis Corporation	
Date of issuance of certificate	July 1, 19—	July 1, 19—

The use of the blank spaces in the stub will be explained in the next section.

Transfer of shares. One of the advantages of the corporate form of business organization is that each stockholder has a right to transfer all or a portion of his interest in the capital stock without the consent of the other stockholders Suppose, for instance, that Tuttle wishes to sell two shares of his stock to Henry Reid Tuttle will fill in the endorsement form which is printed on the back of the certificate, as follows.

For Value Received, I hereby sell,

transfer and assign to Henry Reid

---------------- ----------Two--------------------

Shares of stock within mentioned and hereby authorize

F K Patterson

to make the necessary transfer on the books of the Corporation

WITNESS my hand and seal this 3rd day of

August, 19--

Witnessed by

F C Finch George Tuttle (Seal)

Endorsement Form on Back of Certificate

When the stock certificate is presented to the corporation for transfer of the stock, the certificate is canceled and attached to the stub from which it was originally taken. *The open stubs (stubs to which no unissued or canceled certificates are attached) will indicate the certificates still outstanding.*

In accordance with the terms of Tuttle's endorsement, two new certificates will be issued: one certificate to Henry Reid for the two shares which Tuttle sold to him, and another certificate to Tuttle for the six shares which he retained. The following is the stub of the new certificate issued to Reid; the stub of the certificate for six shares issued to Tuttle would be similarly filled in.

Certificate No. 5

For 2 Shares

Issued to

Henry Reid

Transferred from

George Tuttle

Date August 3, 19--

Original Certificate No.	Number of Original Shares	Number of Shares Transferred
3	8	2

Transfer agent and registrar. Large corporations, particularly those whose stock is listed on a stock exchange, may (either by requirement of the stock exchange or voluntarily) engage a transfer agent and a registrar to perform the duties incident to the issuance and transfer of shares and the keeping of records showing the names and addresses of stockholders and the number of shares owned by each stockholder. A bank or trust company usually is engaged to perform the duties of transfer agent, and another bank or trust company is engaged to perform the duties of registrar.

The employment of a transfer agent and a registrar serves as a safeguard to the stockholders. When certificates are to be transferred, they are delivered to the transfer agent, who cancels the old certificates, signs the new certificates, and passes them to the registrar, who also signs them. Records of the stockholders are kept by the transfer agent. The registrar's chief function is to act as a control against any possible overissuance of stock, and for this purpose the registrar maintains a record showing the aggregate number of shares outstanding.

Classes of stock. Shares of stock entitle their holders to four basic rights, namely:

(1) To share in the management: that is, to vote at the stockholders' meetings.

(2) To share in the profits, that is, to receive dividends when they are declared by the directors
(3) To share in the distribution of the assets of the corporation if it is dissolved
(4) To subscribe to any additional issues of stock of the class held This is known as the *preemptive right*

If there is only one class of stock, these four rights are enjoyed proportionately share and share alike, by all stockholders

If there are two or more classes of stock, one class may enjoy more than its proportionate share of some right, or may have some right curtailed Thus, preferred stock may enjoy special privileges in the matter of dividends or in the distribution of assets in liquidation, on the other hand, the preferred stockholders may have no right to vote, or have a right to vote only under certain conditions, such as the failure of the corporation to pay preferred dividends for a stated period of time

No par value stock Until 1912, the capital stocks of all corporations in this country had a par value In that year, the first American law permitting the issuance of stock without par value was passed in New York Other states have since passed similar laws

Advantages of no-par stock The par value of a share of stock is usually of little significance, compared to the book value and the market value Printing a par value on a certificate has made it easy for promoters to extract money from the uninformed and the unsuspecting There is an inevitable attraction about a $100 00 share of stock offered for $50 00 and many people find it impossible to resist such an offer The omission of a par value may cause some prospective buyers to make inquiries regarding the issuing company's net assets and earnings

No par value stock has another great advantage *It avoids the* discount liability If a share of stock with a par value of $100 00 is issued for $90 00, the purchaser incurs a discount liability of $10 00, and may be required to furnish that amount of cash for the payment of the corporation's debts But if a no par value share is sold for $90 00, there is no discount liability Discount is the difference between a par value and a lower issuing price, if there is no par value, there can be no discount and therefore no discount liability

Recording the issuance of stock The issuance of capital stock involves four steps, namely

(1) The charter authorization for the issuance
(2) The obtaining of subscriptions to the stock, that is obtaining subscribers' agreements to purchase and pay for the stock

(3) The collection of the subscriptions.
(4) The issuance of the certificates.

The entries to record the issuance of capital stock will depend upon whether:

(a) Subscriptions are received for all or only a portion of the authorized shares.
(b) Any time elapses between the taking of the subscriptions and their collection.
(c) The shares have a par value, or are without par value.

Illustrative entries. The remainder of this chapter contains a number of illustrations of entries to record the authorization and issuance of stock. In each case it is assumed that the company is authorized to issue only common stock. The illustrations show the entries to be made under the following conditions:

(A) Subscriptions are received for all the authorized shares; no time elapses between the taking of the subscriptions and their collection.

(1) Entries for par value stock.
(2) Entries for no par value stock.

(B) Subscriptions are received for less than all the authorized shares; time elapses between the taking of the subscriptions and their collection.

(1) Entries for par value stock.
(2) Entries for no par value stock.

Group A Illustrations. Subscriptions are Received for All the Authorized Shares; No Time Elapses Between the Taking of the Subscriptions and Their Collection.

Entries for par value stock. In the three following illustrations it is assumed that a corporation is organized with an authorized issue of 1,000 shares of common stock of $100.00 par value, that subscriptions are received for all the authorized shares, and that the subscriptions are immediately collected in full and the shares issued. All entries are given in journal form.

First illustration. In this illustration it is assumed that the stock is issued at par. The entry for the issuance is:

Cash	100,000.00	
Capital Stock		100,000.00
Issuance, at par, of 1,000 authorized shares of $100.00 par value.		

Second illustration. In this illustration it is assumed that the stock is issued at $110.00 per share.

Cash	110,000 00	
Capital Stock		100,000 00
Premium on Stock		10,000 00
Issuance, at 110, of 1,000 authorized shares of $100 00 par value		

Third illustration. In this illustration it is assumed that the stock is issued at $90.00 per share.

Cash	90,000 00	
Discount on Stock	10,000 00	
Capital Stock		100,000 00
Issuance, at 90, of 1,000 authorized shares of $100.00 par value.		

Entries for no-par stock. In the following illustrations it is assumed that a corporation is organized with an authorized capitalization of 1,000 shares of stock without par value, that subscriptions are received for all these shares at $75.00 each, that the subscriptions are immediately collected, and that the certificates are issued.

First illustration. The laws of some states require that the entire amount received for no-par stock shall be regarded as fixed capital and credited to a capital stock account. Under these conditions, the entry to record the issuance of the stock would be:

Cash	75,000 00	
Capital Stock		75,000 00
Issuance of 1,000 authorized no-par shares at $75 00		

Second illustration. Some states allow corporations to credit a surplus account with a portion of the proceeds of the issuance of no-par stock, and some states allow corporations to use such surplus for dividends. This is regrettable, because it destroys the distinction between paid-in capital and surplus produced by operations.

If a corporation is organized under the laws of a state which permits this practice, it may still credit Capital Stock with the entire proceeds. However, if the directors pass a resolution that, of the $75.00 proceeds from the issuance of the stock, $25 00 is to be regarded as surplus, the accountant will record the issuance as follows:

Cash	75,000 00	
Capital Stock		50,000 00
Paid-In Surplus		25,000 00
To record the issuance, at $75 00 per share, of 1,000 authorized no-par shares, $25,000 00 credited to Paid-In Surplus in accordance with a resolution of the directors		

Group B Illustrations. Subscriptions Are Received for Less than All the Authorized Shares; Time Elapses Between the Taking of the Subscriptions and Their Collection.

Information to be shown by the accounts. If subscriptions are received for less than the total authorized issue, and if time elapses between the taking of the subscriptions and their collection, the accounts should show the following information:

(1) The stock authorized.
(2) The subscriptions received; those collected; and those not collected.
(3) The portion of the authorized stock issued; the portion of the authorized stock not issued; and the portion of the unissued stock for which subscriptions have been received.

The entries to record these facts are illustrated below.

Entries for par value stock. In the following illustrations it is assumed that the authorized stock consists of 1,000 shares of $100.00 par value, and that subscriptions are received for only $75,000.00 par value.

First illustration. In this illustration it is assumed further that the $75,000.00 par value of stock is subscribed for at par, and that the subscriptions are immediately collected. The entries are:

Unissued Stock	100,000.00	
Capital Stock Authorized		100,000.00
To record the authorization of 1,000 shares of *stock of $100.00 par.*		
Cash	75,000.00	
Unissued Stock		75,000.00
To record the collection of subscriptions to $75,000.00 par value of stock and the issuance of certificates.		

The facts relative to the capital stock are now shown in the accounts as follows:

Capital Stock Authorized		$100,000.00
Unissued Stock	$25,000.00	

The difference between the balances of the two accounts is the $75,000.00 par value of the issued stock.

Second illustration. This illustration is the same as the preceding one except that it is now assumed that some time elapses between the date when the subscriptions are received and the date when they are collected and the stock is issued. During this interval, a Subscriptions Receivable account should be carried on the books to show the amount receivable from the subscribers, and a

Stock Subscribed account should show the par value of the stock subscribed for. The entries are:

Unissued Stock	100,000 00	
Capital Stock Authorized		100,000 00
Authorization of 1,000 shares of $100 00 par value		
Subscriptions Receivable	75,000 00	
Subscribed Stock		75,000 00
Subscriptions for 750 shares at par		
Cash	75,000 00	
Subscriptions Receivable		75,000 00
Collection of subscriptions		
Subscribed Stock	75,000 00	
Unissued Stock		75,000 00
Issuance of stock subscribed and fully paid for		

Third illustration. In this illustration it is assumed that, of the $75,000 00 of subscriptions, $60,000 00 is collected and the stock is issued. The entries are:

Unissued Stock	100,000 00	
Capital Stock Authorized		100,000 00
Authorization of 1,000 shares of $100 00 par		
Subscriptions Receivable	75,000 00	
Subscribed Stock		75,000 00
Subscriptions for 750 shares at par		
Cash	60,000 00	
Subscriptions Receivable		60,000 00
Collection of subscriptions to stock of $60,000 00 par value		
Subscribed Stock	60,000 00	
Unissued Stock		60,000 00
Issuance of certificates for fully paid shares		

The account balances resulting from these entries are:

Capital Stock Authorized		$100,000 00
Unissued Stock	$40,000 00	
Subscribed Stock		15,000 00
Subscriptions Receivable	15,000 00	
Cash	60,000 00	

In this illustration the $60,000 00 collected represented the entire subscription price for 600 shares, and nothing was collected on the subscriptions for the other 150 shares. Since the subscriptions for 600 shares were collected, the certificates for these shares were issued, and an entry was made to record the issuance of the shares.

If the $60,000 00 collection had represented a partial collection on the 750 shares, the entry recording the issuance of certificates

would not have been made, and the account balances would have been as follows:

Capital Stock Authorized		$100,000.00
Unissued Stock	$100,000.00	
Subscribed Stock		75,000.00
Subscriptions Receivable	15,000.00	
Cash	60,000.00	

Fourth illustration. This illustration is similar to the third illustration except that it is now assumed that the $75,000.00 par value of stock is subscribed for at 110.

Unissued Stock	100,000.00	
Capital Stock Authorized		100,000.00
Authorization of 1,000 shares of $100.00 par.		
Subscriptions Receivable	82,500.00	
Subscribed Stock		75,000.00
Premium on Stock		7,500.00
Subscriptions for 750 shares at 110.		
Cash	66,000.00	
Subscriptions Receivable		66,000.00
Collection of subscriptions to stock of $60,000.00 par.		
Subscribed Stock	60,000.00	
Unissued Stock		60,000.00
Issuance of fully paid shares.		

Fifth illustration. This illustration also is similar to the third illustration except that it now is assumed that the $75,000.00 par value of stock was subscribed for at 90.

Unissued Stock	100,000.00	
Capital Stock Authorized		100,000.00
Authorization of 1,000 shares of $100.00 par.		
Subscriptions Receivable	67,500.00	
Discount on Stock	7,500.00	
Subscribed Stock		75,000.00
Subscriptions to $75,000.00 par value of stock at 90.		
Cash	54,000.00	
Subscriptions Receivable		54,000.00
Collection of subscriptions to stock of $60,000.00 par value.		
Subscribed Stock	60,000.00	
Unissued Stock		60,000.00
Issuance of certificates.		

Entries for no-par stock. In the following illustrations it is assumed that the authorized issue of stock consists of 1,000 shares of no par value; that subscriptions are received for 750 shares at

$100 00 per share, and that no portion of the proceeds of the issuance of stock is to be credited to Paid-In Surplus

When stock is without par value, the entry debiting Unissued Stock and crediting Capital Stock Authorized (made to record the authorized issue of par value stock) cannot be made, because there is no par value to use as a dollar amount for the entry Instead, a memorandum notation of the number of authorized shares is made in a Capital Stock Issued account, as follows

Capital Stock Issued

							(Authorized issue 1 000 shares)		

First Illustration It is first assumed that 750 shares of stock are issued for cash, no time intervening between the date of subscription and the date of collection The only entry required to record these facts is

Cash	75 000 00	
Capital Stock Issued		75 000 00
Issuance of 750 shares at $100 00		

After this entry is posted, the Capital Stock Issued account will appear as follows

Capital Stock Issued

							(Authorized issue, 1 000 shares)		
						Date	Issued 750 shares		75 000 00

Second illustration This illustration is the same as the preceding one except that it is now assumed that some time elapses between the date when the subscriptions are received and the date when the subscriptions are collected and the stock is issued The entries, in addition to the memorandum of the authorized shares, are

Subscriptions Receivable	75 000 00	
Subscribed Stock		75 000 00
Subscriptions to 750 shares at $100 00		
Cash	75 000 00	
Subscriptions Receivable		75 000 00
Collection of subscriptions		
Subscribed Stock	75 000 00	
Capital Stock Issued		75 000 00
Issuance of fully paid shares		

Third illustration In this illustration it is assumed that, of the $75,000 00 of subscriptions, $60,000 00 is collected and the stock is issued In addition to the memorandum in the Capital Stock Issued account showing the number of authorized shares, the entries on the following page are made

Subscriptions Receivable	75,000.00	
Subscribed Stock		75,000.00
Subscriptions to 750 shares at $100.00.		
Cash	60,000.00	
Subscriptions Receivable		60,000.00
Collection of subscriptions for 600 shares.		
Subscribed Stock	60,000.00	
Capital Stock Issued		60,000.00
Issuance of 600 fully paid shares.		

Capital stock in the balance sheet. The balance sheet should give information about the number of shares of stock authorized, the number issued, and the number unissued. Several illustrations are given below.

First illustration. The authorized issue consists of 1,000 shares of $100.00 par value; the only account with capital stock is:

Capital Stock $100,000.00

The facts are shown in the balance sheet as follows:

Net Worth:
Capital Stock—$100.00 Par Value; Authorized and Issued, 1,000 Shares $100,000.00

Second illustration. The authorized issue consists of 1,000 shares of $100.00 par value; the accounts with capital stock have the following balances:

Capital Stock Authorized		$100,000.00
Unissued Stock	$25,000.00	

The facts are shown in the balance sheet as follows:

Net Worth:
Capital Stock—$100.00 Par Value; Authorized, 1,000 Shares; Issued, 750 Shares $75,000.00

Third illustration. The authorized issue consists of 1,000 shares of no par value, all of which have been issued. The only account with capital stock is:

Capital Stock Issued $85,000.00

The facts are shown in the balance sheet as follows:

Net Worth:
Capital Stock—No Par Value; Authorized and Issued, 1,000 Shares $85,000.00

Fourth illustration. The authorized issue consists of 1,000 shares of no par value. The Capital Stock Issued account is shown on the following page.

Capital Stock Issued

						(Authorized issue 1 000 shares)				
					19—					
					July	1	Issued 500 shares			50 000 00

The facts are shown in the balance sheet as follows

Net Worth
Capital Stock—No Par Value Authorized 1 000 Shares
Issued 500 Shares $50 000 00

Stock subscribed for, subscriptions uncollected Assume that the authorized issue of stock consists of 1,000 shares of $100 00 par value, and that the accounts contain the following balances

Capital Stock Authorized		$100 000 00
Unissued Stock	$40 000 00	
Subscribed Stock		15,000 00
Subscriptions Receivable	15 000 00	
Cash	60 000 00	

If it is expected that the subscriptions will be collected in the near future, they may be shown in the balance sheet under the Current Asset caption but they should be clearly shown as subscriptions to capital stock The balance sheet will then appear as follows

Balance Sheet

Current Assets		Net Worth	
Cash	$60 000 00	*Capital Stock—$100 00 Par*	
Subscriptions to Capital Stock	15 000 00	Value Authorized 1 000 Shares Issued, 600 Shares	$60 000 00
		Subscribed but not Issued, 150 Shares	15 000 00
	$75 000 00		$75 000 00

If there is no immediate intention to call on the subscribers for the uncollected balances of their subscriptions the subscriptions receivable may still be shown on the asset side of the balance sheet, but under the caption of Other Assets

Premium and discount in the balance sheet The balances of Premium on Stock and Discount on Stock accounts should be shown in the Net Worth section of the balance sheet in the manner illustrated below

Net Worth		
Capital Stock—$100 00 Par Value Authorized and Issued 1 000 Shares	$100 000 00	
Premium on Stock	10 000 00	$110 000 00
Earned Surplus		25 000 00

Net Worth		
Capital Stock—$100 00 Par Value Authorized and Issued, 1 000 Shares	$100 000 00	
Discount on Stock	10 000 00	$ 90 000 00
Earned Surplus		25 000 00

If some shares are issued at a discount while other shares are issued at a premium, the amount of discount should be shown in a Discount on Stock account and the amount of premium should be shown in a Premium on Stock account. The stockholder who acquired his stock at a discount is not relieved of his discount liability merely because some other stockholder acquired his stock at a premium.

Paid-in surplus in the balance sheet. If only a portion of the proceeds of no-par stock is credited to a capital stock account, and the remainder is credited to a Paid-In Surplus account, the facts may be shown in the balance sheet as follows:

Net Worth:		
Capital Stock—No Par Value; Authorized and Issued, 1,000 Shares	$50,000.00	
Paid-In Surplus	10,000.00	$60,000.00
Earned Surplus		15,000.00

Or as follows:

Net Worth:		
Capital Stock—No Par Value; Authorized and Issued, 1,000 Shares		$50,000.00
Surplus:		
Paid-In	$10,000.00	
Earned	15,000.00	25,000.00

CHAPTER 19

The Corporation (Continued)

Preferred stock Preferred stocks differ with respect to the special rights conferred upon their holders Thus, stock may he

(1) *Preferred as to dividends*

Such stock entitles its holders to a dividend of a stipulated rate, or amount per share, before any dividend is paid on the common stock Preferred stockholders have no right to dividends, however, unless the company has a surplus available for dividends, and even in that case they have no right to demand dividends unless the directors declare them Stock which is preferred as to dividends may be

(a) Cumulative, in which case all dividends in arrears on preferred stock must he paid hefore dividends can be paid on the common stock

To illustrate, assume $100,000 00 par value of 6% cumulative preferred stock, $100,000 00 par value of common stock, and surplus of $30,000 00, no dividends have been paid on the preferred stock for four years Since the preferred stock is cumulative, the preferred stockholders are entitled to dividends of $24,000 00 before any dividends can he paid to the common stockholders

(b) Noncumulative, in which case a dividend lost in one year is lost forever

Stock which is preferred as to dividends may he

(a) Fully participating, or entitled to dividends at as high a rate as the dividends paid on the common stock

To illustrate, assume $100,000 00 par value of 6% fully participating preferred stock, $200,000 00 par value of common stock, no preferred dividends in arrears, and surplus of $27,000 00

The preferred stock is entitled to a 6% dividend, or $6,000 00

A 6% dividend (or $12,000 00) may then he paid to the common stockholders without making any additional dividend payment to the preferred stockholders

But if a 9% dividend ($18,000.00), instead of a 6% dividend, is paid to the common stockholders, an extra 3% must be paid to the preferred stockholders.

(b) Partially participating, or entitled to participate with the common stock, but only to a limited degree. For instance, the preferred may carry a 6% preference rate, with a right to participate to 8%.

(c) Nonparticipating, or entitled to receive its stipulated preferred dividend but no more, regardless of the rate paid on the common stock.

If the preferred stock is noncumulative and nonparticipating, its holders have a right to only the stipulated rate of return, regardless of the profits earned; and if a dividend is not paid in one year, the right to it is forever lost. On the other hand, if the stock is participating and cumulative, the preferred stockholders will receive as high a rate of dividend as the common stockholders receive, and the preferred dividend for every year must be paid before anything can be paid to the common stockholders.

If a corporation is successful, and its preferred stock is nonparticipating, the common stockholders may receive larger dividends than those paid to the preferred stockholders. As a consequence, the common stock may have a much higher market value than the preferred stock.

(2) *Preferred as to assets.*

In the event of dissolution and liquidation, stock that is preferred as to assets is entitled to payment in full before any distribution is made on the common stock.

To illustrate, assume $100,000.00 par value of preferred stock, $100,000.00 par value of common stock, and assets of only $150,000.00 after paying all liabilities. If the preferred stock is preferred as to assets, $100,000.00 should be paid to the preferred stockholders, and only $50,000.00 to the common stockholders. If the preferred stock is not preferred as to assets, the assets should be divided between the common and the preferred stockholders in the ratio of the par value of the two classes of stock—in this case, equally.

The preference as to assets may extend only to the par of the stock, or the preferred stockholders may have a right to receive par and all dividends in arrears. Just what the

preferred stockholders' rights are must be determined in each case by reference to the stock certificate or the charter.

The fact that stock is preferred as to dividends does not make it preferred as to assets also, nor is stock which is preferred as to assets necessarily preferred as to dividends also

Accounts with various classes of stock. If several classes of stock are issued, the account titles for each class should clearly indicate its nature For instance, a ledger might contain the following accounts.

Unissued Stock—Common
Capital Stock Authorized—Common
Subscriptions Receivable—Common
Subscribed Stock—Common
Unissued Stock—7% Preferred
Capital Stock Authorized—7% Preferred
Subscriptions Receivable—7% Preferred
Subscribed Stock—7% Preferred
Discount on Stock—Common
Premium on Stock—7% Preferred

To illustrate the use of such accounts, assume the following facts:

Common stock

The authorized issue is 1,000 shares of \$100 00 par value; 750 shares are subscribed at 90, subscriptions for 600 shares are collected and the stock is issued.

Preferred stock—7%:

The authorized issue is 500 shares of \$100 par value; 400 shares are subscribed at 110, subscriptions for 250 shares are collected and the stock is issued.

Following are the entries to record the facts just mentioned.

Unissued Stock—Common	100,000 00	
Capital Stock Authorized—Common		100,000 00
Authorization of 1,000 shares of \$100 00 par		
Subscriptions Receivable—Common	67,500 00	
Discount on Stock—Common	7,500 00	
Subscribed Stock—Common		75,000 00
To record subscriptions to 750 shares of common stock at 90		
Cash	54,000 00	
Subscriptions Receivable—Common		54,000 00
To record collection of subscriptions to 600 shares		

Subscribed Stock—Common	60,000 00	
Unissued Stock—Common		60,000 00
Issuance of 600 shares for which subscriptions have been collected.		
Unissued Stock—7% Preferred	50,000.00	
Capital Stock Authorized—7% Preferred		50,000.00
Authorization of 500 shares of $100.00 par.		
Subscriptions Receivable—7% Preferred	44,000.00	
Premium on Stock—7% Preferred		4,000.00
Subscribed Stock—7% Preferred		40,000.00
To record subscriptions to 400 shares at 110		
Cash	27,500 00	
Subscriptions Receivable—7% Preferred		27,500.00
To record collection of subscriptions to 250 shares.		
Subscribed Stock—7% Preferred	25,000 00	
Unissued Stock—7% Preferred		25,000 00
Issuance of 250 shares for which subscriptions have been collected.		

Common and preferred stock in the balance sheet. If there are two classes of stock, the amounts thereof should be shown separately in the balance sheet, and the special rights of the preferred stock should be described briefly. No attempt need be made to divide the surplus in order to show the rights of the two classes of stock therein. The balance sheet presentation of the facts may, therefore, be as follows:

Net Worth:		
Capital Stock—$100 00 Par Value:		
Preferred, 6% Participating, Cumulative; Authorized and Issued, 1,000 Shares	$100,000.00	
Common, Authorized and Issued, 1,000 Shares	100,000.00	
Total Capital Stock	$200,000 00	
Earned Surplus	75,000 00	
Total Net Worth		$275,000.00

Stock issued for property. When par value stock is issued for property other than cash, the question arises of whether the property is really worth the par of the stock issued. If it is not worth the par of the stock, a Discount on Stock account should be debited with the excess of the par of the stock over the value of the property. Such a debit to Discount on Stock is not likely to be made, however, because directors are disposed to value the property at the par of the stock, and in so doing they are acting within their legal powers, for the law allows directors great latitude in exercising their discretion regarding the value of property acquired by issuance of shares of stock.

One of the advantages of no-par stock is that it reduces the incentive to overvalue assets, because it is not necessary to inflate the valuation of property received for stock in order to balance the par value of the stock If stock without par value is issued, the property can be recorded at its fair value, and a capital stock account can be credited with the same amount However, the use of no-par stock has not done away entirely with the overvaluation of assets issued for stock

Stock values The following terms are used in expressing different bases for the valuation of stock

Par value This is a nominal value, printed on the certificate For instance, if a corporation is authorized to issue $100,000 00 of capital stock, represented by 1,000 shares, the par value of each share is $100 00

Book value The book value of a share of stock of a certain class is computed by dividing the total amount of capital stock and surplus applicable to the class by the number of shares of the class outstanding

For instance, if a corporation has 1,000 shares of common stock (and no preferred stock) outstanding, and its balance sheet shows

Capital stock	$100 000 00	
Surplus	30 000 00	
Total		$130 000 00

the book value of each share is $130 000 00 ÷ 1,000, or $130 00

If there is preferred stock outstanding, the preferred stockholders' interest in the surplus will depend upon whether the stock is participating, and also upon whether the preferred stock is cumulative and there are preferred dividends in arrears

Market value This is the price at which a share of stock can be sold It depends partly on the book value of the stock and partly on the corporation's earning record and the prospects of future profits and dividends

Liquidation value This is the amount which a stockholder may expect to receive if the corporation goes out of business, disposes of its assets, pays its liabilities, and distributes the residue among its stockholders If common stock only is outstanding the liquidation value depends on the book value of the stock and the probable shrinkage and loss which would be incurred in liquidation If common and preferred stocks are outstanding, the liquidation values of both classes depend also upon whether the preferred stock is preferred as to assets

Redemption value Corporations sometimes issue preferred stock with a right to redeem it The redemption price may be stated in

terms such as: *par, par and dividends in arrears,* or *par and a premium of $5.00 per share.*

Stated value. The concept of stated value is discussed at some length in Chapter 20.

Books peculiar to corporations. Corporations keep three books which are not kept by individual proprietorships or partnerships. These are:

Subscribers' ledger.
Stockholders' ledger.
Minute book.

Subscribers' ledger. If stock subscriptions are collectible in installments, the Subscriptions account in the general ledger is debited with the total of all subscriptions and credited with the amounts collected from all subscribers. To show the amounts receivable from individual subscribers, a subscribers' ledger may be kept. Each subscriber's account in this ledger is debited with the amount of his subscriptions and credited with the amounts collected from him.

The Subscriptions account in the general ledger is a controlling account, and the subscribers' ledger is a subsidiary ledger.

Stockholders' ledger. The stockholders' ledger contains an account with each stockholder, showing the number of shares issued in his name. The entries usually show the number, rather than the dollar value, of the shares.

The stockholders' ledger is controlled by the Capital Stock account (or by the difference between the credit balance of the Capital Stock Authorized account and the debit balance of the Unissued Stock account). Therefore, the accounts in the stockholders' ledger have credit balances, each stockholder's account being credited with the number of shares issued to him, and debited with the number of shares surrendered by him for transfer.

Minute book. A record of all the actions taken by the stockholders and directors at their meetings is kept by the secretary of the company in a minute book. This book does not contain debit and credit entries; it contains a record of events written in narrative form, or in the form of resolutions.

The minute book usually contains a copy of the company's by-laws. The rights and duties of the stockholders, directors, and officers are in general governed by the state corporation law; in many particulars, however, they are stipulated by the corporation's own by-laws. The by-laws contain other stipulations with respect to the management of the corporation, such as the dates on which the regular meetings of the stockholders and directors shall be held, the

formalities to be complied with in calling special meetings, and any transactions (such as the issuance of new stock with special privileges) that require the approval of the stockholders The by laws are usually passed by the stockholders, but in some states they may be passed or amended by the directors

Partnerships and Corporations—Advantages and Disadvantages If several people are to contribute capital to a business, a choice may be had between the partnership and the corporate form of organization The following disadvantages of the partnership form should be understood

(1) Each partner is individually liable for such partnership debts as cannot be paid from the partnership assets Stockholders are usually not liable for the debts of the corporation if they have paid the corporation the full par value of their stock

(2) Partners usually have equal authority in the management of the partnership business stockholders have votes in proportion to the number of shares held In some states, preferred stock may be issued without voting rights

(3) A partnership may be dissolved by the death, insanity, insolvency or withdrawal of a partner, therefore, the continued life of the partnership is constantly in jeopardy A corporation can be dissolved only by the expiration of the period stated in the charter, by agreement of the stockholders by forfeiture of the charter by the state, or by judicial decree

(4) A partner cannot withdraw from a partnership or sell his interest to another person without the consent of the other partners, if he undertakes to do so without their consent, he renders himself liable to a suit for damages A stockholder can sell his stock to any willing purchaser whenever he desires, the consent of the other stockholders is not required

(5) If a partner dies, the partnership is dissolved, his estate has a right to be paid the amount of his interest, but his heirs have no right to enter the business as partners without the consent of the other partners If a stockholder dies, his stock passes to his heirs, who thus acquire an interest in the business

(6) A stockholder can pledge his stock as collateral to a loan, a partner cannot easily pledge his partnership interest Therefore, a stockholder is in a better position than a partner to borrow needed funds

(7) If a partnership needs additional capital, it must be obtained from only a few people; a partnership with many partners is impracticable. A corporation can raise capital by selling stock to innumerable people.

(8) Except in a few states, partnerships may not hold title to real estate; title must be in the name of an individual partner. Therefore, a partnership usually finds it extremely difficult to make long-term borrowings on bonds. A corporation can hold title to real estate, and can pledge its property as security to a bond issue.

On the other hand, the corporation has certain disadvantages:

(1) The state requires the payment of a fee at the time the corporation is organized, and an annual franchise tax for the privilege of continuing operations.

(2) Since the stockholders are not personally liable for the corporation's debts, it is sometimes difficult for a corporation to borrow money. Banks frequently refuse to make loans to corporations unless certain individual stockholders endorse the notes.

(3) Corporations are required to furnish state officials with many reports not required of partnerships.

(4) A corporation receives its charter from one of the states: if it desires to do business in other states, it should obtain licenses from those states, and pay a license fee to each of them. Failure to obtain such licenses may result in losses of far greater amount than the fees. For instance, each state regards the corporations organized under the laws of other states as *foreign* corporations; a state may refuse unlicensed foreign corporations the privilege of bringing actions in its courts, and heavy losses may be incurred because of the inability to enforce claims by actions at law.

(5) A corporation has a right to conduct only the kind of business mentioned in its charter: to engage in other lines of business, it must obtain an amendment of its charter.

(6) Restrictions of various kinds are placed upon corporations by the various states. These restrictions vary. In some states a corporation cannot own the stock of another corporation; in some states it cannot own its own stock; in some states its liabilities cannot exceed a certain percentage of the capital stock. Also, corporations are frequently prohibited from owning more real estate than is required for their business uses.

Changing from a partnership to a corporation. To illustrate the entries to be made to effect a change from partnership organization to corporate organization, let us assume that A and B are partners, sharing profits and losses equally, and that their balance sheet appears as follows

A AND B
Balance Sheet
December 31, 19—

Assets			Liabilities and Net Worth		
Cash		$ 5 000	Accounts Payable		$ 9 000
Accounts Receivable	$25 000				
Less Reserve for Bad			Net Worth		
Debts	1 000	24 000	A Capital	$30 000	
Merchandise Inventory		30 000	B Capital	20 000	50 000
		$59 000			$59 000

It is decided to incorporate The corporation, to be known as The A B Company, is to obtain a charter authorizing the issuance of $100,000 00 of capital stock, consisting of 1,000 shares of $100 00 par value

A and B expect to sell a portion of this stock later to other parties, in anticipation thereof, they make the following adjustments in the valuation of their assets

The goodwill of the business is to be valued at $6,000 00

The merchandise inventory is to be written down $2,000 00

The reserve for bad debts is to be increased $500 00

After making these adjustments, the two partners are to make additional cash investments sufficient to bring their capitals to $35,000 00 for A and $25,000 00 for B, and are to take capital stock in these amounts

Adjustment of asset values; additional investments The following entries will be made on the partnership books to adjust the asset values in accordance with the agreement, and to record the additional cash investments

Goodwill	6 000 00	
Merchandise Inventory		2 000 00
Reserve for Bad Debts		500 00
A Capital		1 750 00
B Capital		1 750 00
To make the adjustments indicated		
Cash	6 500 00	
A Capital		3 250 00
B Capital		3 250 00
To record additional cash investments prior to incorporation		

After these entries are posted, the balance sheet of the partnership, immediately prior to the incorporation, will be:

A AND *B*
Balance Sheet
December 31, 19—

Assets			Liabilities and Net Worth		
Cash		$11,500	Accounts Payable		$ 9,000
Accounts Receivable	$25,000				
Less Reserve for Bad Debts	1,500	23,500	Net Worth:		
			A, Capital	$35,000	
Merchandise Inventory		28,000	*B*, Capital	25,000	60,000
Goodwill		6,000			
		$69,000			$69,000

Alternative procedures. The remaining entries to record the change from the partnership to the corporation will depend upon whether:

(1) The partnership books are to be retained for use by the corporation.
(2) The partnership books are to be closed and new books are to be opened by the corporation.

Partnership books retained. If the partnership books are to be retained as the books of the corporation, the only entries necessary to record the change from the partnership to the corporation are those required to eliminate the partners' Capital accounts and to set up the capital stock accounts. These entries are as follows:

Unissued Stock	100,000.00	
Capital Stock Authorized		100,000.00
To record the authorization of 1,000 shares of stock of $100.00 par value.		
A, Capital	35,000.00	
B, Capital	25,000.00	
Unissued Stock		60,000.00
To record the issuance of 600 shares of stock to *A* and *B*, in exchange for their capital interests in the partnership.		

Partnership books closed; new books opened for corporation. If a new set of books is to be used by the corporation, the partnership books must be closed and the new books must be opened. This is accomplished as follows:

(1) Entries closing the partnership books by recording the transfer of the assets and the liabilities to the corporation, in exchange for stock of the corporation, as shown on the following page.

The *A B* Company	69,000 00	
Reserve for Bad Debts	1,500 00	
Cash		11,500 00
Merchandise Inventory		28,000 00
Accounts Receivable		25,000 00
Goodwill		6,000 00
To record the transfer of the partnership's assets to The *A B* Company		
Accounts Payable	9,000 00	
The *A B* Company		9,000 00
To record the assumption of our liabilities by the corporation		
Stock of The *A B* Company	60,000 00	
The *A B* Company		60,000 00
To record the receipt of 600 shares of the corporation stock in payment for the net assets transferred.		
A, Capital	35,000 00	
B, Capital	25,000 00	
Stock of The *A B* Company		60,000 00
To record the division of the stock between the partners, and to close their Capital accounts		

(2) Entries on the corporation's books to record the authorized issue of stock, the stock subscriptions of the partners, and the acquisition of the partnership's net assets in payment of the subscriptions

Unissued Stock	100,000 00	
Capital Stock Authorized		100,000 00
To record the authorization of 1,000 shares of $100 00 par value each		
Cash	11 500 00	
Merchandise Inventory	28,000 00	
Accounts Receivable	25 000 00	
Goodwill	6,000 00	
Reserve for Bad Debts		1,500 00
A and *B*		69,000 00
To record the purchase of the assets of *A* and *B*, partners		
A and *B*	9,000 00	
Accounts Payable		9,000 00
To record the assumption of the partnership liabilities		
A and *B*	60,000.00	
Unissued Stock		60,000 00
To record the issuance of stock to *A* and *B* for their net assets		

Changing from a corporation to a partnership. Corporations with a few stockholders are sometimes changed to partnerships. To illustrate the accounting procedure involved, assume that a corporation's balance sheet immediately before the change is as shown on the following page.

THE X Y COMPANY
Balance Sheet
June 30, 19—

Assets			Liabilities and Net Worth		
Cash		$ 6,000.00	Accounts Payable		$15,000.00
Accounts Receivable	$30,000.00		Net Worth:		
Less Reserve for Bad Debts	1,000.00	29,000.00	Capital Stock	$50,000.00	
			Earned Surplus	10,000.00	60,000.00
Merchandise		40,000.00			
		$75,000.00			$75,000.00

X owns $30,000.00 of stock, and *Y* owns $20,000.00. Hence *X*'s interest in the surplus is $6,000.00, and *Y*'s interest is $4,000.00.

Entries if corporation books are retained. If the corporation's books are to be used by the partnership, the only entry to record the change in the form of organization is:

Capital Stock	50,000.00	
Earned Surplus	10,000.00	
X, Capital		36,000.00
Y, Capital		24,000.00
To record the change from corporate to partnership form of organization.		

New books for the partnership. If a new set of books is to be used by the partnership, the corporation's books must be closed and new books must be opened. This is accomplished as follows:

(1) *Entry on the corporation's books:*

Capital Stock	50,000.00	
Earned Surplus	10,000.00	
Accounts Payable	15,000.00	
Reserve for Bad Debts	1,000.00	
Cash		6,000.00
Accounts Receivable		30,000.00
Merchandise		40,000.00
To record the dissolution of the corporation and distribution of the assets, subject to liabilities and reserve, to the stockholders.		

(2) *Entry to open the partnership books:*

Cash	6,000.00	
Accounts Receivable	30,000.00	
Merchandise	40,000.00	
Reserve for Bad Debts		1,000.00
Accounts Payable		15,000.00
X, Capital		36,000.00
Y, Capital		24,000.00
To open the books of the partnership.		

CHAPTER 20

The Corporation (Concluded)

The nature of surplus Surplus may be broadly defined as the portion of a corporation's net worth not represented by its capital stock

Formerly, one Surplus account was regarded as sufficient, and it was credited with such diverse increments in net worth as the following

- Operating profits
- Extraneous profits, such as those resulting from sales of fixed assets and investment securities
- Premiums on par value stock and amounts received for no-par stock in excess of the amounts credited to a capital stock account
- Profits made by purchases and sales of the company's own stock
- Donations by stockholders
- Increases in the valuation of fixed assets shown by appraisals, but not realized by the sale of the assets

During recent years accountants have come to believe that such diverse increments in net worth should not be credited to a single surplus account, but that various increments should be classified as earned surplus and capital surplus

Earned surplus Most accountants now favor crediting an account called Earned Surplus (or sometimes merely Surplus) with only those profits which result from operations or which are realized by extraneous transactions, such as the sale of fixed assets or investment securities

Capital surplus. All the surplus elements not properly credited to the Earned Surplus account may be credited to a single Capital Surplus account It is preferable, however, to use several accounts in order to maintain a clear record of the elements of capital surplus Some of the accounts which may be used are

Premium on Stock

This account is credited with the excess of the amount received for par value stock over the par of the stock issued The title of the account should indicate the class of stock on which the premium was received

Paid-in Surplus.

This account is credited with the excess of the amount received for no-par stock over the amount credited to a capital stock account. Separate paid-in surplus accounts should be used for the various classes of stock.

Premium on par value stock and the excess of the issuing price of no-par stock over the amount credited to the capital stock account are both paid-in surplus. In the case of par value stock it is possible to use the specific title, Premium on Stock; this title cannot be used in connection with no-par stock—because a premium is the excess of the amount received over par—and, therefore, it is necessary to use the general title, "Paid-in Surplus."

Profits on Sales of Treasury Stock.

This account is credited with any profits made by a company as a result of acquiring its own stock and reselling it at a price in excess of cost.

Donated Surplus.

Stockholders sometimes make donations to a corporation; this account would be credited with the amounts thereof. Or suppose that a city gives a corporation a plant to induce it to locate in the city; the debits to the Land account and the Buildings account would be offset by a credit to this account.

Capital surplus may, therefore, be the name of a single account to which all capital surplus elements are credited, or it may be a term applied to a group of accounts containing various capital surplus elements.

In the past, fixed assets were sometimes written up from a valuation on a cost basis to a valuation on an appraisal basis, with an offsetting credit to Surplus. Most accountants now believe that it is undesirable to make entries in the accounts to show valuations disclosed by appraisals. Those accountants who believe that it may sometimes be permissible to make entries writing up fixed assets to appraisal values are in agreement that the offsetting credit should not be made in the Earned Surplus account, but they are not in agreement as to the account which should be credited. Two opinions are held:

(1) *The increment may be regarded as an element of capital surplus; it may be credited to an account with some title such as Surplus from Appraisal of Land and Buildings, or Appraisal*

Surplus; and it may be shown in the balance sheet as one of the elements of capital surplus, in the manner illustrated below:

Net Worth			
Capital Stock			
Preferred—$100 00 Par Value, Authorized and Issued, 1,000 Shares		$100,000 00	
Common—No Par Value Authorized and Issued, 5,000 Shares at Stated Value		500,000 00	
Total Capital Stock			$600,000 00
Surplus			
Earned		$225,000 00	
Capital			
Premium on Stock—Preferred	$10,000 00		
Paid in—on Common Stock	50,000 00		
Profit on Sales of Treasury Stock—Common	15 000 00		
Appraisal of Land and Buildings	40 000 00		
Total Capital Surplus		115,000 00	
Total Surplus			340,000 00

(2) *The increment disclosed by an appraisal may be regarded as a part of the net worth but it should not be regarded as surplus (not even capital surplus) because it has not been realized; it should be credited to an account with some title such as Unrealized Increase in Valuation of Land and Buildings—per Appraisal, and should be shown in the balance sheet as a distinct element of net worth, in the manner illustrated below.*

Net Worth			
Capital Stock			
Preferred—$100 00 Par Value, Authorized and Issued, 1,000 Shares		$100,000 00	
Common—No Par Value, Authorized and Issued, 5,000 Shares at Stated Value		500,000 00	
Total Capital Stock			$600,000 00
Surplus			
Earned		$225,000 00	
Capital			
Premium on Stock—Preferred	$10,000 00		
Paid in—on Common Stock	50,000 00		
Profit on Sales of Treasury Stock—Common	15,000 00		
Total Capital Surplus		75,000 00	
Total Surplus			300,000 00
Unrealized Increase in Valuation of Land and Buildings—per Appraisal			40 000 00

If there are many capital surplus accounts, the balances of some of them may be combined in the balance sheet, but any balance in an appraisal surplus account should be set out separately since such a surplus is unrealized.

Treatment of stock premium and discount accounts. When a single Surplus account was kept, it was the custom to close the Premium on Stock account to it, and to write off the Discount on Stock account by charges to Surplus either immediately or over a period of years.

It is now coming to be recognized that this procedure is of doubtful propriety. The Premium on Stock account is a capital surplus account, and its balance should not be transferred to the earned surplus. Moreover, to write off the Discount on Stock account against earned surplus conceals the stockholders' liability, which is important in the event the corporation is unable to pay its debts, and beclouds the records so that they no longer clearly show the portion of the net worth created by stockholders' investments and the portion accumulated by the retention of earnings. Modern practice, therefore, appears to favor retaining the Premium on Stock account and the Discount on Stock account permanently, and showing their balances in the balance sheet in some manner such as the following:

Net Worth:			
Capital Stock—$100.00 Par Value:			
Common—Authorized and Issued, 1,000 Shares	$100,000.00		
Preferred—Authorized and Issued, 500 Shares	50,000.00		
Total		$150,000.00	
Surplus:			
Earned Surplus	$ 75,000.00		
Premium on Preferred Stock	5,000.00		
Total	$ 80,000.00		
Deduct Discount on Common Stock	10,000.00	70,000.00	
Net Worth			$220,000.00

Organization expenses. The organization of a corporation involves the payment of attorneys' fees and other expenses. Theoretically, such expenses should be regarded as benefiting the corporation during the entire period of its existence, and should be written off gradually (by charges to Profit and Loss or Surplus) over the life of the company. But, from a practical standpoint, it is impossible to estimate the life of the company, and accountants have, therefore, adopted the conservative policy of writing off such expenses by charges to Surplus during the year of organization or during the first few years of the company's life. Any portion not written off is shown in the balance sheet under the caption of Deferred Charges.

Profit and loss and earned surplus statements. The changes in earned surplus during a period may be the result of the factors stated on the following page.

The net profit or income or the net loss resulting from regular operations

Extraneous profits or losses

These changes in surplus result from transactions which are not elements of regular operations, such as profits or losses on sales of fixed assets or investments

Corrections of operating profits or losses of prior periods

Assume that the inventory at the end of 1948 was undervalued $25,000 00, thus causing an understatement of the profits of that year the error was discovered in 1949 If the same understated inventory were used in the statements for 1949, the profits for that year would be overstated The correct inventory should be used in the statements for 1949, and the correction of the error should be shown as a separate item in the statements

Dividends

In the statements prepared at the close of a period, the net profit or income resulting from regular operations should be clearly distinguished from all other changes in earned surplus For many years it was the established practice to make this distinction by ending the profit and loss statement at the net income line, and showing in a surplus statement any extraneous profits, corrections of operating profits or losses of prior years, and dividends, thus.

THE BATES COMPANY
Statement of Profit and Loss
For the Year Ended December 31, 1949

Net Sales	$500 000 00
Deduct Cost of Goods Sold	400 000 00
Gross Profit on Sales	$100 000 00
Deduct Expenses	55 000 00
Net Income	$ 45 000 00

THE BATES COMPANY
Statement of Earned Surplus
For the Year Ended December 31, 1949

Surplus December 31, 1948		$110 000 00
Add		
Net Income for the Year		45 000 00
Understatement of Inventory, December 31, 1948		25 000 00
Total		$180 000 00
Deduct		
Loss on Sale of Land and Building	$30 000 00	
Dividends	20 000 00	50 000 00
Surplus December 31 1949		$130 000 00

The statement procedure just illustrated is still regarded as proper, but some accountants have recently expressed the fear that readers of accounting reports are likely to assume that the profit and loss statement tells all that is to be told about profits and losses, and are not aware of the significance of matters disclosed in the surplus statement; these accountants advocate protecting such people by combining the profit and loss statement and the surplus statement. Such a combined statement follows:

THE BATES COMPANY
Statement of Profit and Loss and Earned Surplus
For the Year Ended December 31, 1949

Net Sales.	$500,000 00
Deduct Cost of Goods Sold .	400,000 00
Gross Profit on Sales	$100,000 00
Deduct Expenses...	55,000 00
Net Income for the Year .. .	$ 45,000 00
Add Correction of Understatement of Profit for 1948 resulting from Understatement of Inventory at the End of that Year	25,000 00
Total Increases in Earned Surplus	$ 70,000 00
Deduct Loss on Sale of Land and Building .	30,000 00
Increase in Earned Surplus before Dividends	$ 40,000 00
Deduct Dividends.... .	20,000 00
Increase in Earned Surplus ..	$ 20,000 00
Earned Surplus, December 31, 1948	110,000 00
Earned Surplus, December 31, 1949	$130,000 00

In recent years many accountants have advocated the adoption of the "clean surplus" theory, which means that extraneous profits and losses (such as those resulting from the disposal of fixed assets) and corrections of profits of prior periods should be shown in the profit and loss statement before the "Net Income" line. Those who advocate this procedure advance arguments such as the following:

> Unless corrections of the profits of prior periods are shown in the profit and loss statement, the total of the amounts shown as net income in the profit and loss statements for a series of periods will not be the true aggregate net income for those periods.
>
> It is not always possible to determine with certainty whether an item should properly be regarded as a correction of the profits of a prior period or an element of operations of the current period. For instance, assume that, at the end of a certain year, the reserve for bad debts is found to be inadequate; did the inadequacy result from insufficient provisions in the current year, or from insufficient provisions in prior years? If, in such cases, a charge is made to surplus al-

though part or all of the additional reserve provision is required because the current year's provision is insufficient, the net income for the current year is overstated

To some extent, at least, the profit or loss on the disposal of a fixed asset is a correction of the operating charges for depreciation moreover, the total profit on the disposal of a fixed asset is income, although it may not be an operating profit

The *following statement is in conformity with the* "clean surplus theory

THE BATES COMPANY
Statement of Profit and Loss and Earned Surplus
For the Year Ended December 31 1949

Net Sales	$500 000 00
Deduct Cost of Goods Sold	400 000 00
Gross Profit on Sales	$100 000 00
Deduct Expenses	55 000 00
Net Profit	$ 45 000 00
Add Correction of Understated Inventory on December 31 1948	25 000 00
Total	$ 70 000 00
Deduct Loss on Sale of Land and Building	30 000 00
Net Income	$ 40 000 00
Earned Surplus December 31, 1948	110 000 00
Total	$150 000 00
Deduct Dividends	20 000 00
Earned Surplus December 31 1949	$130 000 00

The Committee on Accounting Procedure of the American Institute of Accountants issued a bulletin in December, 1947, stating its opinion that the amount shown as "net income" should be determined before such items as the following

Material charges and credits related to operations of prior years

Material charges and credits resulting from unusual sales of assets other than those in which the business ordinarily deals

Material losses of a kind not usually insured against, such as those resulting from wars, riots, and so forth

The write-off of material amounts of intangibles, such as the complete elimination of goodwill

The write-off of material amounts of bond premium, discount, or expense

The Committee expresses no preference as to whether such items should be shown in a separate surplus statement (as illustrated on

page 282) or in a combined statement of profit and loss and earned surplus (as illustrated on page 283).

Dividends. Under what conditions does a company have a legal right to declare a dividend? It is difficult to state general rules which are not subject to exceptions because the laws of the various states differ in their regulations, especially with respect to dividends on no par value stock. In general, it may be said that a corporation has a right to pay a dividend if it has a surplus which has been produced by realized profits from operations or extraneous transactions, or from premiums on the sale of par value stock. Dividends cannot legally be paid from surplus created by writing up assets to higher values, because the profit has not been realized by a sale. On the other hand, the surplus need not be decreased by writing down fixed assets merely because their market value has declined.

Liability for declared dividend. After a legal dividend has been declared and notice of the declaration has been given to the stockholders, the unpaid dividend becomes a liability which should be shown in the current liability section of the balance sheet. The declaration and the payment of the dividend are recorded by the following entries:

Dec. 31—Dividends (to be closed to Earned Surplus)	5,000.00	
Dividends Payable		5,000.00
To record the declaration of the regular annual dividend of 5%, payable January 10, 19—.		
Jan. 10—Dividends Payable	5,000.00	
Cash		5,000.00
To record the payment of the regular annual dividend.		

Stock dividends. Dividends are sometimes paid in capital stock instead of in cash. To illustrate, assume that a company has 1,000 shares of authorized stock of $100.00 par, of which 600 shares are outstanding. If a 10% stock dividend is declared, the declaration may be recorded by the following entry:

Earned Surplus	6,000.00	
Stock Dividend Payable		6,000.00
To record the declaration of a dividend of 10%, payable in stock.		

The payment of the dividend by the issuance of stock will be recorded as follows:

Stock Dividends Payable	6,000.00	
Unissued Stock		6,000.00
To record the issuance of 60 shares of stock in payment of the stock dividend.		

If a balance sheet is prepared between the date of declaration and the date of payment of the stock dividend, how should the credit balance of the Stock Dividend Payable account be shown? It should not be shown among the current liabilities, because it is not payable in cash. It may be shown as follows:

Capital Stock—$100 00 Par Value Authorized 1 000 Shares		
Issued, 600 Shares	$60 000 00	
To Be Issued, January 10 19— as a Stock Dividend, 60 Shares	6 000 00	
Total Issued or to Be Issued		$66 000 00

Dividends in arrears on preferred stock. No stockholder has an unconditional right to a dividend unless it has been declared by the directors. This rule applies to preferred stock as well as to common stock. But if dividends on cumulative preferred stock are in arrears, there is an obligation to pay these arrearages before paying dividends to the common stockholders. The amount of the cumulative dividends in arrears should, therefore, be shown in the balance sheet. This is usually done by adding a footnote below the balance sheet totals, thus:

Note. Cumulative dividends on preferred stock were in arrears on [the balance sheet date] in the amount of $12 000 00

Treasury stock. Treasury stock is a corporation's own stock which has been issued, reacquired, and not canceled in accordance with a formal procedure specified by law. It will be noted that there are four important elements of this definition:

(1) Treasury stock must be the company's own stock; holdings of the stocks of other companies are not treasury stock.
(2) The stock must have been issued.
(3) The stock must have been reacquired by the issuing corporation, by purchase or donation.
(4) The stock must not have been canceled. Cancellation of stock is effected by a procedure prescribed by law, and places the stock in the status of unissued, or even unauthorized shares.

Unissued and treasury stock—purchaser's liability for discount. A stockholder who acquires unissued stock at a discount assumes a contingent liability for the amount of the discount. This means that, if the corporation is unable to pay its debts, the creditors may demand that stockholders who acquired unissued stock at a discount pay the corporation the amount of the discount.

If a person purchases treasury stock which was originally issued at par or more, he has no contingent liability for the discount

Treasury stock is not an asset. Treasury shares may have a ready marketability and may be sold; but so may unissued stock be sold; and it seems obvious that treasury stock, like unissued stock, is not an asset but is merely a possible source of additional funds.

Although treasury stock has frequently been shown in balance sheets as an asset (sometimes even combined with securities which *are* assets, under some title such as "Government Bonds and Other Securities"), accountants now generally recognize that the purchase of treasury stock does not result in the acquisition of an asset, but causes a reduction in the corporation's net worth.

Treasury stock in the balance sheet. Since the purchase of treasury stock causes a reduction of the corporation's net worth to the extent of the cost of the stock, the cost should be shown as a deduction in the net worth section of the balance sheet. There are several ways of showing the deduction; the method illustrated below is one which is growing in favor among accountants. The illustration is based on the following facts with respect to the capital stock:

> The authorized issue is 1,000 shares of $100.00 par value.
> All the authorized stock has been issued.
> The corporation has reacquired 100 shares at a cost of $12,000.00

You should note the distinction between "issued" and "outstanding." All the 1,000 shares have been issued, and are so shown. The number of outstanding shares is not stated in the balance sheet, but can be easily determined; there are 900 outstanding shares: the difference between the 1,000 issued shares and the 100 treasury shares.

Net Worth:		
Capital Stock—$100.00 Par Value: Authorized and Issued, 1,000 Shares, of Which 100 Shares Are in the Treasury	$100,000.00	
Earned Surplus	25,000.00	
Total	$125,000.00	
Deduct Cost of Treasury Stock	12,000.00	
Net Worth		$113,000.00

If the company has a capital surplus as well as an earned surplus, the facts may be shown in the balance sheet as follows:

Net Worth:		
Capital Stock—$100.00 Par Value: Authorized and Issued, 1,000 Shares, of Which 100 Shares Are in the Treasury	$100,000.00	
Earned Surplus	25,000.00	
Capital Surplus	10,000.00	
Total	$135,000.00	
Deduct Cost of Treasury Stock	12,000.00	
Net Worth		$123,000.00

If the company has an operating deficit, the facts may he shown as follows

Net Worth			
Capital Stock—$100 00 Par Value Authorized and Issued 1 000 Shares of Which 100 Shares Are in the Treasury		$100 000 00	
Deduct			
Deficit	$ 5 000 00		
Cost of Treasury Stock	12 000 00	17 000 00	
Net Worth			$83 000 00

If the stock had heen acquired hy donation, there would he no cost to deduct, and the facts would he shown as follows

Net Worth		
Capital Stock—$100 00 Par Value Authorized and Issued 1 000 Shares of Which 100 Shares Acquired by Donation Are in the Treasury	$100 000 00	
Surplus	25 000 00	
Net Worth		$125 000 00

Recording treasury stock acquisitions As indicated above, the cost of treasury stock is shown as a deduction in the Net Worth section of the halance sheet To provide the information for this balance sheet presentation, the Treasury Stock account should show the cost of the stock The entry for the purchase of the treasury shares mentioned ahove would he

Treasury Stock	12 000 00	
Cash		12 000 00
To record the purchase of 100 shares of treasury stock.		

This entry should be made regardless of whether the shares have a par value or are without par value, and regardless of the amount which was received for the shares when they were issued The treasury stock account title should indicate the nature of the stock if there is more than one class of issued stock If the company has only one class of stock, the account title may be merely Treasury Stock, otherwise, it might be Treasury Stock—Preferred, or Treasury Stock—Common, or Treasury Stock—Common—No Par Value

Stockholders sometimes donate shares to the company, this may he done hecause the company is in a poor financial condition, the stockholders do not wish to invest additional funds, and they, therefore, donate portions of their stock which can be resold to obtain additional funds Since donated shares are acquired without cost, no dehit and credit entries can he made to record the acquisition A memorandum notation is made in the Treasury Stock account, as shown on the following page

Treasury Stock

Date	50 shares donated							

Sales of treasury stock. To illustrate the entry to be made if purchased treasury stock is sold at its cost, let us assume that 100 shares of treasury stock were acquired at a cost of $12,000.00, and were resold for $12,000.00; the entry for the sale is:

Cash	12,000.00	
Treasury Stock		12,000.00
To record the sale of 100 shares of treasury stock.		

If this stock was sold at a price in excess of cost, the profit should be credited to a capital surplus account, as follows:

Cash	13,500.00	
Treasury Stock		12,000.00
Profit on Sales of Treasury Stock		1,500.00
To record the sale of 100 shares of treasury stock.		

If donated shares are sold, the entire selling price is a profit. Assume that the 50 shares of donated stock mentioned above are sold for $4,500.00; the entry is:

Cash	4,500.00	
Profit on Sales of Treasury Stock		4,500.00
To record the sale of 50 shares of donated treasury stock.		

If purchased treasury stock is sold at a price below cost, the loss may be charged to the Profit on Sales of Treasury Stock account, if such an account exists as a result of sales of treasury stock of the same class. Otherwise the loss should be charged to the Earned Surplus account.

The Profit on Sales of Treasury Stock account is a capital surplus account; it should be shown as a separate item in the Net Worth section of the balance sheet, or combined with other elements of capital surplus.

Treasury stock and stated capital. One of the advantages of the corporate form of business organization is that of limited liability, which means that the stockholders cannot be held personally liable for the debts of the corporation. Since the law gives the stockholders this advantage, it is only fair that the creditors be given some assurance that the corporation will maintain a certain capital fund on which they can rely for the payment of debts.

The history of corporate law indicates that there has been some difficulty in giving stockholders the benefit of limited liability and at the same time safeguarding the creditors. This difficulty arose from two principal causes.

First Before the advent of no-par stock, the capital fund was generally defined by law as the par value of the outstanding stock, and dividends were not legally payable if they reduced the net worth below that amount But when no par stock came into use, some states allowed corporations to divide the issuing price into two parts, one of which could be credited to a capital stock account and the other to a surplus account, and there was considerable uncertainty as to whether the portion credited to a surplus account was permanent capital or available for dividends To clarify this situation, many states have revised their corporation laws to include a definition of permanent, or "stated," capital In general, stated capital is the sum of the par value of all par value shares issued, the entire amount received for no par shares, and any amounts transferred by a stock dividend from surplus to capital stock In some states, however, only a portion of the amount received for no-par shares need be included in stated capital, and the remainder may be credited to Paid in Surplus and be distributed as a dividend

Second In the past, the creditors usually were safeguarded only by placing a limitation on the amount which could be paid to the stockholders as dividends Thus, for example, if a corporation had a capital stock of $100,000 00 and surplus of $25,000 00, the laws generally provided that distributions to stockholders *in the form of dividends* could not exceed the $25,000 00 surplus But no restriction was placed on the payments which could be made to stock holders for purchases of treasury stock Consequently, although the stockholders of the corporation mentioned above could receive only $25,000 00 as dividends, any amount might be paid to them for purchases of treasury shares In effect, therefore, the creditors had no assurance that *any* capital would be retained by the corporation for their protection To correct this situation many states have amended their corporation laws to provide, in effect, that, if disbursements are made for treasury stock, a portion of the surplus equal to the cost of the treasury shares held shall be regarded as fixed or stated capital In other words, the laws provide that the amount available for dividends shall be the balance in the Surplus account minus the cost of stock held in the treasury Under such laws, if a company had a surplus of $25,000 00 and was holding treasury stock which cost $12,000 00, only $13 000 00 of its surplus would be available for dividends and $12,000 00 of its surplus would be "restricted " The restriction could be removed by selling the treasury shares, or by complying with the legal requirements for their cancellation Legal cancellation would eliminate these shares from the issued stock, and perhaps also from the authorized stock, and would effect a reduction in the stated capital

The differing effects of a dividend and a treasury stock purchase upon surplus should be noted: If a company has $25,000.00 of surplus and a dividend of $25,000.00 is paid, the surplus disappears; if a $25,000.00 disbursement is made for the purchase of treasury stock, the surplus remains but it is restricted and cannot be used for dividends.

If a corporation owns treasury stock and the laws of the state in which it was incorporated place a restriction on dividends to the extent of the cost of the treasury shares, its balance sheet should be prepared in such a manner as to give recognition to the fact that there is a restriction on surplus. The following balance sheet illustrates a procedure for disclosing this information.

Net Worth:		
Capital Stock—$100.00 Par Value: Authorized and Issued, 1,000 Shares, of Which 100 Shares Are in the Treasury		$100,000.00
Surplus:		
Not Available for Dividends—Equal to Cost of Treasury Stock	$12,000.00	
Free	13,000.00	25,000.00
Total		$125,000.00
Deduct Cost of Treasury Stock		12,000.00
Net Worth		$113,000.00

CHAPTER 21

Bonds, Sinking Funds, and Sinking Fund Reserves

Sources of corporate funds When a corporation finds it necessary or desirable to raise additional funds, it may borrow them on a short-term note, on a long-term mortgage note, or on bonds, or it may issue additional stock It usually is regarded as good business management to borrow on short-term notes only in case the funds are needed for current operations and the current operations presumably will produce the cash with which to repay the loan If the funds are to be used for plant additions or permanent investments, they usually should be obtained by issuance of long term securities in the form of stocks, long-term mortgage notes, or bonds

Mortgage notes and bonds If all the desired long term funds can be borrowed from one lender, the borrower may issue a note and a mortgage, the note will recite the terms of the obligation (date, maturity, interest rate, and so forth) and the mortgage will effect a pledge of certain property as security A mortgage originally was a conveyance of property from a debtor to a creditor or his representative, subject to the proviso that, if the debtor met his obligation, the conveyance would be nullified In most states the form of the mortgage has been changed to give it the status of a lien instead of a conveyance or transfer of title

If it is impossible to obtain the funds from one lender, an issue of bonds may be offered to the public Since the bonds may be held by many people, who are not known at the time of arranging for the issue and who will change with each transfer of a bond from one holder to another, the lenders cannot be named in a mortgage Therefore, the borrower selects a trustee, usually a bank or trust company, to act as a representative of the bondholders, and a mortgage, or deed of trust, is executed conveying a conditional title to the pledged property to the trustee as agent for the bondholders This trustee is called the *trustee under the mortgage*

Since long-term borrowings by corporations are usually represented by bonds, the remainder of this chapter deals specifically with bonds However, except as indicated above, long term mortgage notes are essentially of the same nature as secured bonds Therefore, what is said in the remainder of this chapter with respect to secured bonds may be regarded as also applying generally to long-term mortgage notes

Stocks and bonds—advantages and disadvantages. Bond issues have certain advantages over stock issues:

(1) Bondholders have no vote: therefore, the stockholders do not have to share the management with them.
(2) The money cost may be lower. If common stock is issued, the contributors of new capital will share prorata with the old common stockholders in accumulated surplus and earnings. If preferred stock is issued, it may be participating, in which case the dividends may be greatly in excess of reasonable interest on bonds: or it may be nonparticipating, in which case it usually is necessary to give the preferred stock a dividend rate higher than the interest rate at which bonds could be sold, because bonds are a positive, and usually a secured, liability with a definite maturity, and also because bond interest is payable unconditionally, whereas the payment of preferred dividends is dependent upon earnings and the existence of surplus.
(3) The fact that bond interest is deductible as an expense in the computation of income taxes, whereas dividends are not, is frequently a deciding factor in the choice of securities to be issued, and has sometimes even influenced corporations to convert preferred stock into bonds.

On the other hand, if interest and principal payments on a bond issue are not made when due, the bondholders may institute foreclosure proceedings, the borrowing company may lose fixed assets which are essential to its operations, and it may even be forced into liquidation with a consequent loss which will leave a very small equity for the stockholders.

Classes of bonds. It is impossible to discuss all the different kinds of bonds which have been devised for use in corporate financing. Some of the more common forms are:

(1) Secured Bonds.
These differ as to the nature of the property which is pledged as security. Three classes of secured bonds are in common use:
(a) Real Estate Mortgage Bonds.
These are secured by mortgages on land, or on land and buildings.
(b) Chattel Mortgage Bonds.
These are secured by mortgages on tangible personal property, such as machinery, equipment of various kinds, and merchandise.

(c) Collateral Trust Bonds

These are secured by a deposit of stocks, bonds, or other negotiable instruments

(2) Unsecured Bonds

Unsecured bonds are sometimes called *debentures* Since they are not secured by a pledge of any specific property, their value depends upon the general credit of the borrower

First and second mortgages Bonds may be secured by first, second, or even third mortgages on the same property If the obligations are not met, and foreclosure ensues, the proceeds of the mortgaged property must go first to the satisfaction of the first mortgage bondholders, any residue to the satisfaction of the second mortgage bondholders, and so on

Second mortgage bonds are thus obviously a less desirable investment than first mortgage bonds, because they are secured by a secondary lien on the pledged assets First mortgage bonds are called *prior lien* or *underlying* bonds, second mortgage bonds are called *junior* bonds

Registered and coupon bonds Bonds may be classified in three groups on the basis of registry, as follows

(1) Registered as to both principal and interest

The name of the owner of the bond is recorded on the books of the issuing company or its fiscal agent, and the interest is paid by checks drawn to the order of the bondholders This method has the advantage of safeguarding the owner against loss or theft but it has two disadvantages First, a sale and transfer can be made only by assignment and registry, instead of merely by delivery second, the check method of paying interest is burdensome

(2) Registered as to principal only

By registering the bonds as to principal only, and attaching coupons for the interest, the owner is safeguarded against loss or theft of principal, and the debtor company is relieved of the burden of issuing numerous interest checks

(3) Unregistered

Such a bond is transferable by mere delivery, the owner's endorsement is not required The danger from loss or theft is, of course, much greater than with a bond which is registered as to principal The interest is collected by clipping the interest coupons and presenting them to a bank for deposit or collection

Recording the bond issue. A separate liability account should be kept with each bond issue. If there is more than one issue the account title for each issue should contain a comprehensive description of the issue, such as "First Mortgage, 6%, Bonds Payable, 1962," or "Collateral Trust, 7%, Bonds Payable, 1960." The year is the year of maturity.

Assuming that a company has only one bond issue, all of which is sold for cash at par, the entry to record the issue is:

Cash . . .	100,000.00	
Bonds Payable . . .		100,000.00

The mortgage, or trust deed, states the amount of bonds which may be issued. Each bond is signed by the trustee under the mortgage to indicate that it is secured by the mortgage; this is called *authentication by the trustee*. Very frequently, the amount of bonds immediately authenticated by the trustee and issued by the borrowing company is less than the total issue provided for under the trust deed. To illustrate, assume that a company's real estate is ample in value to secure an issue of $100,000.00 of first mortgage bonds. Only $60,000.00 of funds are immediately required, but there may be future requirements for $40,000.00 more. If the trust deed were drawn to secure an issue of only $60,000.00, a subsequent loan of $40,000.00 could be secured only by a second mortgage; a second mortgage issue, being less desirable, might require a higher interest rate and might be difficult to market. In anticipation of its future requirements, the company may authorize a total first mortgage bond issue of $100,000.00, drawing a trust deed as security for a loan of that amount. If $100,000.00 of bonds are authenticated, but only $60,000.00 are issued, the entries are:

Unissued Bonds	100,000.00	
First Mortgage Bonds Payable		100,000.00
To record the authorized issue of first mortgage, 6%, real estate bonds payable, due March 1, 1962.		
Cash	60,000.00	
Unissued Bonds . .		60,000.00
Sale of $60,000.00 bonds at par.		

The facts with respect to authorized, unissued, and issued bonds should be shown in the balance sheet as follows:

Fixed Liabilities:		
First Mortgage, 6%, Real Estate Bonds Payable, Due March 1, 1962:		
Authorized .	$100,000.00	
Less Unissued	40,000.00	$60,000.00

The amount of unissued bonds should be shown in the balance sheet, because the bondholders have a right to know that \$40,000.00 of additional bonds can be issued under the same trust deed which secures their bonds. Thus, if the real estate is carried on the balance sheet at \$150,000.00, the holders of the \$60,000.00 of issued bonds would be interested in knowing that an additional \$40,000.00 of bonds could be issued. On the basis of the issued bonds only, the ratio of security to debt is 150 to 60, but on the basis of the total authorized issue, the ratio of security is only 150 to 100.

If the bonds are registered as to principal or interest, or both, subsidiary records should be kept, showing the names and addresses of the holders.

Issues between interest dates. Bonds are often sold between interest dates, in which case the purchaser is usually required to pay the accrued interest. To illustrate, assume that \$10,000.00 of 6% bonds are sold two months after the interest date, at par and accrued interest, the entry will be:

Cash	10,100.00	
Bonds Payable		10,000.00
Bond Interest		100.00

When the semiannual interest is paid four months later, the entry will be

Bond Interest	300.00	
Cash		300.00

The \$300.00 debit to Bond Interest made at the time of paying the interest, minus the \$100.00 credit to Bond Interest made at the time of selling the bonds, leaves the account with a \$200.00 balance, which is the interest expense for four months

Payment of interest. Most bonds provide for the payment of interest semiannually. The methods of paying bond interest depend upon whether the bonds are registered as to interest. Two conditions are illustrated.

(1) The bonds are registered as to interest. Checks will be mailed to the several bondholders, but, to avoid drawing a separate voucher for each check, one voucher and check may be drawn for the entire amount of the interest; this check will be deposited in a special bond interest bank account. The entry will be.

The *X* Bank—Bond Interest Account	6,000.00	
Cash		6,000.00
To record deposit of funds in the account for payment of bond interest		

Separate checks will then be drawn on the bond interest account, the total of these checks being debited to Bond Interest (expense) account, and credited to The X Bank—Bond Interest Account.

(2) The bonds are not registered as to interest, but bear coupons which are clipped by the holders and presented for collection. The bondholder usually deposits the coupons in his own bank account, and the bank makes the collection. The coupons usually designate a bank at which collection can be made; when the semiannual interest is due, the company deposits the total amount of the interest in a special account at the bank where the coupons are payable: when coupons are presented for payment, the bank pays them and charges the amount to the company's account. The entries by the issuing company are as follows:

On or before the date when interest is payable:

The X Bank—Bond Interest Account	6,000.00	
Cash		6,000.00
Transfer of funds to special bank account for payment of interest.		

On the date when interest is payable:

Bond Interest	6,000.00	
Accrued Bond Interest Payable		6,000.00
To record the expense and liability for six months' interest.		

At the end of the month or at any other date when the bank reports the amount of coupons paid:

Accrued Bond Interest Payable	5,700.00	
The X Bank—Bond Interest Account		5,700.00
To record the payment of interest coupons presented to the bank.		

Since some bondholders may be dilatory in presenting coupons for payment, balances may remain in the special bank account and in the Accrued Bond Interest Payable account. The balance sheet should show as an asset any balance in the special bank account, and should show as a liability any balance in the Accrued Bond Interest Payable account; the mere deposit of funds in a special bank account does not constitute payment of the liability.

Bond discount. If the borrowing company's credit standing is not excellent, or if the security back of a bond issue is not wholly satisfactory, or if the bond interest rate is lower than the market rate for bonds of a similar nature, it may be necessary to sell the bonds at less than par. Let us assume, by way of illustration, that

a ten year, 5% bond issue of $100,000 00 is disposed of for a net amount of $98,000 00 The issuance of these bonds will be recorded by the following entry.

Cash	98 000 00	
Bond Discount	2 000 00	
Bonds Payable		100 000 00
Sale of bonds at 98		

Amortization of bond discount In the preceding illustration, $98,000 00 was received, but $100,000 00 must be repaid The $2 000 00 excess of the amount to be paid over the amount received is an expense to be spread over the life of the bonds The total interest cost over the life of the bonds includes the discount as well as the semiannual interest payments

The Bond Discount account may be charged off to Bond Interest as an expense in equal amounts each six months Since there will be twenty semiannual interest payments during the ten year life of the bonds, the discount may be written off in twenty equal installments of $100 00 each The charges to Bond Interest each six months will be

Bond Interest	2 500 00	
Cash		2 500 00
Payment of semiannual interest		
Bond Interest	100 00	
Bond Discount		100 00
To amortize 1/20 of the discount		

These semiannual amortizations will completely write off the Bond Discount account at the end of the tenth year, and will produce equal total semiannual charges to Bond Interest account

Bond premium. If a bond issue is marketed at a premium, the premium reduces the net interest charge For instance, if the bonds mentioned in the preceding illustration were sold for $102,000 00, the $2,000 00 premium received when the bonds were sold would not have to be repaid at their maturity, and could therefore be offset against the interest payments to determine the net cost of the use of the money

The entry at the time of the issuance of the bonds would be

Cash	102 000 00	
Bonds Payable		100 000 00
Bond Premium		2 000 00
Sale of bonds at 102		

The payment of the bond interest and the amortization of the bond premium in equal semiannual installments would be recorded by the entries shown on the following page

Bond Interest	2,500.00	
Cash		2,500.00
Payment of semiannual interest.		
Bond Premium	100.00	
Bond Interest		100.00
Amortization of bond premium.		

Bond premium and discount in the balance sheet. It has long been regarded as correct accounting procedure to show unamortized bond discount on the asset side of the balance sheet under the Deferred Charges caption, and unamortized bond premium on the liability side under the caption of Deferred Credits. For instance, assume that a trial balance contained the following balances:

First Mortgage, 6%, Real Estate Bonds, 1965		$100,000.00
First Mortgage Equipment Bonds, 5½%, 1955		50,000.00
Premium on First Mortgage Real Estate Bonds		3,000.00
Discount on First Mortgage Equipment Bonds	$1,800.00	

The customary presentation of these facts in the balance sheet is:

Assets

Deferred Charges:		
Unamortized Discount on First Mortgage Equipment Bonds		$ 1,800.00

Liabilities and Net Worth

Fixed Liabilities:		
First Mortgage, 6%, Real Estate Bonds, 1965	$100,000.00	
First Mortgage Equipment Bonds, 5½%, 1955	50,000.00	
Total Fixed Liabilities		$150,000.00
Deferred Credits:		
Unamortized Premium on First Mortgage Real Estate Bonds		3,000.00

Recently there has been some agitation in favor of showing unamortized premium as an addition to, and unamortized discount as a deduction from, the par of the bonds, thus:

Liabilities and Net Worth

Fixed Liabilities:		
First Mortgage, 6%, Real Estate Bonds, 1965	$100,000.00	
Add Unamortized Premium	3,000.00	$103,000.00
First Mortgage Equipment Bonds, 5½%, 1955	$ 50,000.00	
Deduct Unamortized Discount	1,800.00	48,200.00

This prodecure has not been generally adopted by the accounting profession.

Retirement of bonds. Bonds may be retired:

(1) In total at maturity, out of the borrowing company's general funds. The payment of the bonds under such conditions is recorded by debiting Bonds Payable and crediting Cash.

(2) In a series Bonds retirable in this way are called *serial* bonds

To illustrate assume that $100 000 00 is borrowed nothing is to be paid off during the first five years, at the end of the sixth year and each year thereafter, $20,000 00 is to be paid, so that the bonds will be retired serially by the end of the tenth year Each retirement is recorded by a debit to Bonds Payable and a credit to Cash

(3) In total at maturity out of a sinking fund created by periodical deposits with a sinking fund trustee This method is discussed in the following pages

Sinking funds If bonds are to be retired at maturity through the operation of a sinking fund, the borrowing company agrees as one of the terms of the trust deed or trust indenture to make periodical deposits with a sinking fund trustee, who invests the deposited funds in securities The sinking fund trustee may, or may not, be also the trustee under the mortgage Sinking fund deposit agreements take various forms, particularly with respect to the amounts of the periodical contributions As a simple illustration, we shall assume that a company borrows $100 000 00 which is repayable at the end of ten years It agrees to deposit $10,000 00 with the sinking fund trustee at the end of the first year the trustee is to invest the fund in good securities and add the interest earned on these securities to the fund At the end of the second year, the company will deposit enough to bring the total fund up to $20 000 00 At the end of the third year, the company will deposit enough to bring the total fund up to $30 000 00 and so on to the end of the tenth year The annual contributions by the company will decrease because the interest collected by the trustee on the accumulating fund will increase each year

If the trustee is able to earn 5% on the securities in the fund, the accumulation of the sinking fund can be tabulated in the manner illustrated below

End of Year	Interest Earned	Deposit	Total Fund
1		$10 000 00	$ 10 000 00
2	$ 500 00	9 500 00	20 000 00
3	1 000 00	9 000 00	30 000 00
4	1 500 00	8 500 00	40 000 00
5	2 000 00	8 000 00	50 000 00
6	2 500 00	7 500 00	60 000 00
7	3 000 00	7 000 00	70 000 00
8	3 500 00	6 500 00	80 000 00
9	4,000 00	6 000 00	90 000 00
10	4,500 00	5 500 00	100 000 00
	$22 500 00	$77 500 00	

The annual entries for the deposit of funds with the trustee and the collection of interest by the trustee on sinking fund securities, are indicated below:

End of first year:

Sinking Fund Cash	10,000.00	
Cash...		10,000.00
Deposit with sinking fund trustee.		

End of second year:

Sinking Fund Cash.	500.00	
Sinking Fund Income		500.00
Income earned on sinking fund securities. (The sinking fund income account will be closed to Profit and Loss.)		
Sinking Fund Cash..	9,500.00	
Cash.... . .		9,500.00
Deposit with sinking fund trustee.		

The trustee is expected to invest the sinking fund deposits in securities, but there usually will be some uninvested cash in the fund. The company's records should show what portion of the sinking fund is represented by cash and what portion is represented by securities. Therefore, when the trustee reports the purchase of securities, the company should make an entry debiting Sinking Fund Securities and crediting Sinking Fund Cash.

The sinking fund cash and securities may be shown in one total in the balance sheet, or they may be detailed as follows:

Sinking Fund:		
Cash	$ 300 00	
Securities .	19,700 00	$20,000.00

The sinking fund may be shown under the Other Assets caption, or as a separate item.

When the bonds mature, the sinking fund securities will be disposed of by the trustee, who will pay the bonds from the cash in the sinking fund. Assuming that the entire $100,000.00 fund was invested in securities, that the securities were disposed of without loss, and that the bonds were paid, the trustee would report the facts to the debtor company, and the company would make entries as follows:

Sinking Fund Cash	100,000.00	
Sinking Fund Securities		100,000.00
Sale of sinking fund securities.		
Bonds Payable..............	100,000 00	
Sinking Fund Cash..		100,000.00
Retirement of the bonds.		

If a loss is incurred in the disposal of the sinking fund securities, the company will be obliged to make another deposit with the trustee in an amount sufficient to bring the fund up to the required balance Assume that the trustee loses \$500 00 on the disposal of the securities, the company will be obliged to make up this loss by a deposit of \$500 00, and its entries will be

Sinking Fund Cash	99 500 00	
Loss on Sale of Sinking Fund Securities	*500 00*	
Sinking Fund Securities		100 000 00
Sale of sinking fund securities at a loss		
Sinking Fund Cash	500 00	
Cash		500 00
Additional deposit with trustee to cover the loss from the disposal of the securities in the fund.		
Bonds Payable	100,000 00	
Sinking Fund Cash		100 000 00
Retirement of bonds by sinking fund trustee		

On the other hand, if the trustee makes a profit of \$540 00 on the disposal of the sinking fund securities, the residue of the fund will be returned to the company The company's entries will be

Sinking Fund Cash	100,540 00	
Sinking Fund Securities		*100 000 00*
Profit on Sale of Sinking Fund Securities		540 00
Sale of sinking fund securities at a profit		
Bonds Payable	100 000 00	
Sinking Fund Cash		100 000 00
Retirement of bonds by sinking fund trustee		
Cash	540 00	
Sinking Fund Cash		540 00
Excess in sinking fund received from trustee		

Sinking Fund Reserves In addition to requiring sinking fund deposits, the terms of the bond issue may restrict the amount of dividends which the borrowing company can pay during the life of the bonds by requiring the establishment of a sinking fund reserve by *transfers from earned surplus.*

The sinking fund reserve requirement is intended to prevent the impairment of the company's working capital Suppose, for instance, that the company which issued the bonds mentioned in the foregoing illustration had a working capital (current assets minus current liabilities) of \$100,000 00 after issuing its bonds This was considered no more than adequate to carry on operations During the first year of the life of the bonds, the company made \$20,000 00 of profits, if the company paid dividends to the full extent of the \$20,000 00 profits, and also paid \$10,000 00 to the sinking fund

trustee, the working capital would be reduced $10,000.00. If this took place year after year, the company's working capital might be so impaired that it would not be able to carry on its operations profitably. A year might soon come when, because of inadequate working capital, the company's operations would be so unprofitable that it would not be able to make its sinking fund deposit.

In order to restrict the payment of dividends, and thus to avoid a dangerous impairment of working capital, the terms of the bond issue may include a provision similar to the following: "In addition to increasing the sinking fund $10,000.00 each year, the company shall transfer $10,000.00 each year from its Surplus account to a Sinking Fund Reserve account; the surplus set apart in this reserve shall not be available for dividends until the bonds have been paid."

Referring to the illustration in the section on sinking funds, and assuming that the company was obligated to set up a reserve in accordance with the provision just quoted, the following annual entries would be made:

End of first year:

Sinking Fund Entry:		
Sinking Fund Cash	10,000.00	
Cash		10,000.00
Deposit with the sinking fund trustee.		
Sinking Fund Reserve Entry:		
Surplus	10,000.00	
Sinking Fund Reserve		10,000.00
To transfer a portion of the surplus to a reserve.		

End of second year:

Sinking Fund Entries:		
Sinking Fund Cash	500.00	
Sinking Fund Income		500.00
Income collected by sinking fund trustee on securities in the fund.		
Sinking Fund Cash	9,500.00	
Cash		9,500.00
Deposit with the trustee.		
Sinking Fund Reserve Entry:		
Surplus	10,000.00	
Sinking Fund Reserve		10,000.00
To transfer a portion of the surplus to a reserve		

You should remember that a sinking fund reserve is really a part of the surplus; for the time being, dividends cannot be charged to it, but it is surplus nevertheless. Therefore, it should be shown in the balance sheet under the Net Worth caption, as illustrated on the following page.

Net Worth			
Capital Stock		$500 000 00	
Earned Surplus			
Sinking Fund Reserve—Not Available for Dividends	$20 000 00		
Free—Available for Dividends	15 000 00		
Total Earned Surplus		35 000 00	
Total Net Worth			$535,000 00

It is sometimes difficult to understand that a sinking fund reserve is really a part of the surplus, because other reserves (such as the reserve for bad debts and the reserves for depreciation) represent decreases in the value of assets The nature of the sinking fund reserve would be more easily understood if it were called "Surplus Appropriated for Sinking Fund," or "Surplus Not Available for Dividends Until After the Bonds Have Been Paid"

After the bonds have matured and been paid, the bondholders have no further right to restrict the payment of dividends, therefore, an entry can be made debiting the Sinking Fund Reserve and crediting Surplus Thus the balance in the Sinking Fund Reserve is returned to Surplus, and is again free from any contractual limitations upon the payment of dividends However, it might be expedient for the directors to refrain voluntarily from the payment of dividends from this surplus in order to protect the company's working capital position

CHAPTER 22

Manufacturing Accounts

Manufacturing costs. A merchandising concern buys its goods ready for resale; its books, therefore, contain a Purchases account which shows the cost of merchandise purchased. A manufacturing concern buys raw materials, but the process of manufacture also involves expenditures for labor and for a great variety of manufacturing expenses; its books must, therefore, contain accounts in which to record all these manufacturing costs.

There are three principal elements of manufacturing cost: materials, direct labor, and manufacturing expense.

The following statement indicates the elements which enter into the computation of the cost of goods manufactured.

THE *A B C* COMPANY — Exhibit D

Statement of Cost of Goods Manufactured
Year Ended December 31, 1948

Materials:			
Inventory, December 31, 1947		$ 12,000	
Purchases	$94,000		
Less Returned Purchases and Allowances	1,500		
Net Purchases	$92,500		
Freight In	800		
Total		93,300	
Total Inventory and Purchases		$105,300	
Less Inventory, December 31, 1948		9,000	
Cost of Materials Used			$ 96,300
Direct Labor			80,750
Manufacturing Expenses:			
Indirect Labor		$ 9,125	
Heat, Light, and Power		3,500	
Building and Machinery Repairs		300	
Depreciation:			
Buildings		3,500	
Machinery and Equipment		6,000	
Insurance		950	
Taxes		1,400	
Factory Supplies		3,500	
Miscellaneous Factory Expense		2,500	
Total Manufacturing Expenses			30,775
Total Materials, Labor, and Manufacturing Expenses			$207,825
Add Goods in Process Inventory, December 31, 1947			15,000
Total			$222,825
Deduct Goods in Process Inventory, December 31, 1948			11,000
Cost of Goods Manufactured			$211,825

Materials include only those things which enter into and become a part of the finished product, supplies used in the operation of the factory are not classified as materials because they do not become part of the finished product

The nature of direct labor can best be shown by distinguishing it from indirect labor Employees who work on the product with tools, or who operate machines in the process of production, are direct laborers, but superintendents and foremen, who supervise the work of production, and engineers and janitors, whose services are incidental to the process of production, are indirect laborers

Manufacturing expense, or manufacturing overhead, includes all costs incurred in production which cannot be classed as material or direct labor Manufacturing expense includes, among other things, indirect labor, depreciation of the factory building and equipment cost of power, supplies, taxes, and insurance on the assets used in manufacture, and repairs and upkeep of the factory

The cost of finished goods manufactured during a given period cannot be determined, however, merely by adding the expenditures during the period for materials, direct labor, and manufacturing expense There may be unfinished goods, called *goods in process*, on hand at the end of the period, and the cost of these unfinished goods must be deducted to determine the cost of goods finished Similarly, there may have been goods in process at the beginning of the period, and these must also be taken into consideration

Profit and loss statement The profit and loss statement of a manufacturing company does not necessarily differ from that of a trading company except in one particular The profit and loss statement of a manufacturing company shows the cost of goods *manufactured* (as determined in the statement of cost of goods manufactured), whereas the profit and loss statement of a trading company shows the cost of goods *purchased* The profit and loss statement of The *A B C* Company appears on page 307

Surplus statement There are no unusual features in the surplus statement of a manufacturing company The surplus statement of The *A B C* Company appears below

THE *A B C* COMPANY Exhibit B

Statement of Earned Surplus
For the Year Ended December 31, 1948

Balance December 31 1947	$71 450 00
Net Income for the Year per Exhibit C	18 025 00
Total	$89 475 00
Less Dividends	6 000 00
Balance December 31, 1948	$83 475 00

THE *A B C* COMPANY — Exhibit C

Statement of Profit and Loss

For the Year Ended December 31, 1948

Gross Sales		$300,000
Less Returned Sales and Allowances		2,000
Net Sales		$298,000
Less Cost of Goods Sold:		
Finished Goods Inventory, December 31, 1947	$ 20,000	
Cost of Goods Manufactured, per Exhibit D	211,825	
Total	$231,825	
Less Finished Goods Inventory, December 31, 1948	17,000	
Cost of Goods Sold		214,825
Gross Profit on Sales		$ 83,175
Less Selling Expenses:		
Advertising	$ 9,000	
Salesmen's Salaries	20,360	
Salesmen's Traveling Expense	8,000	
Miscellaneous Selling Expense	2,500	
Total Selling Expenses		39,860
Net Profit on Sales		$ 43,315
Less General Expenses:		
Office Salaries	$ 3,040	
Officers' Salaries	18,000	
Stationery and Printing	400	
Office Supplies	300	
Depreciation of Furniture and Fixtures	750	
Bad Debts	800	
Miscellaneous General Expense	700	
Total General Expenses		23,990
Net Profit on Operations		$ 19,325
Add Other Income:		
Discount on Purchases		1,200
Net Profit on Operations, and Other Income		$ 20,525
Deduct Other Expense:		
Discount on Sales		2,500
Net Income		$ 18,025

Statement of cost of goods sold. Some accountants prepare a statement of cost of goods sold instead of a statement of cost of goods manufactured. Such a statement would be similar to the statement of cost of goods manufactured, on page 305, except that the title would be changed from Cost of Goods Manufactured to Cost of Goods Sold, and would appear as follows:

THE *A B C* COMPANY — Exhibit D

Statement of Cost of Goods Sold

For the Year Ended December 31, 1948

and part of the material in the profit and loss statement above would be incorporated in the statement of cost of goods sold, after the line

"Cost of Goods Manufactured," as shown in the following partial statement of cost of goods sold.

Cost of Goods Manufactured	$211 825 00
Add Finished Goods Inventory December 31 1947	20 000 00
Total	$231 825 00
Deduct Finished Goods Inventory December 31 1948	17 000 00
Cost of Goods Sold	$214,825 00

The matter thus included in the statement of cost of goods sold would be excluded from the profit and loss statement, which would then show the computation of the gross profit as follows

THE *A B C* COMPANY — Exhibit C

Statement of Profit and Loss

For the Year Ended December 31, 1948

Gross Sales	$300 000 00
Less Returned Sales and Allowances	2,000 00
Net Sales	$298 000 00
Less Cost of Goods Sold, per Exhibit D	214,825 00
Gross Profit on Sales	$ 83 175 00

Balance sheet. The balance sheet of a manufacturing company will usually contain three inventory accounts (finished goods goods in process, and raw materials) and certain factory fixed asset account balances The balance sheet of The *A B C* Company is shown on page 309

Working papers The foregoing statements were prepared from the working papers on pages 310 and 311 These working papers have a new pair of columns headed *Manufacturing* which contain the balances of all accounts used in determining the cost of goods manufactured, and the inventories of raw materials and goods in process at the end of the year

The working papers were prepared as follows

Trial Balance columns

Copied from general ledger trial balance

Adjustments columns

(A) Provision for bad debts, to bring total reserve to $1 000 00 estimated amount required.
(B) Provision for depreciation of factory buildings at 5% per annum.
(C) Provision for depreciation of machinery and equipment at 10% per annum.
(D) Provision for depreciation of furniture and fixtures at 15% per annum.
(E) Accrued salaries and wages, charged to the expense account and credited to a liability account.
(F) Unexpired insurance transferred to a prepaid expense account.

Exhibit A

THE *A B C* COMPANY
Balance Sheet
December 31, 1948

Assets

Current Assets:			
Cash		$25,000	
Accounts Receivable	$10,000		
Less Reserve for Bad Debts	1,000	39,000	
Inventories:			
Finished Goods	$17,000		
Goods in Process	11,000		
Raw Materials	9,000	37,000	
Total Current Assets			$101,000
Fixed Assets:			
Land		$10,000	
Factory Buildings	$70,000		
Less Reserve for Depreciation	15,500	54,500	
Machinery and Equipment	$60,000		
Less Reserve for Depreciation	21,000	39,000	
Furniture and Fixtures	$ 5,000		
Less Reserve for Depreciation	2,250	2,750	
Total Fixed Assets—Cost Less Depreciation			106,250
Prepaid Expenses:			
Unexpired Insurance			300
			$207,550

Liabilities and Net Worth

Current Liabilities:		
Accounts Payable	$ 22,800	
Accrued Salaries and Wages	1,275	
Total Current Liabilities		$ 24,075
Net Worth:		
Capital Stock	$100,000	
Earned Surplus, per Exhibit B	83,175	
Total Net Worth		183,175
		$207,550

THE *A B C* COMPANY
Working Papers
Year Ended December 31, 1948

	Trial Balance		Adjustments		Manufacturing		Profit and Loss Statement		Surplus Statement		Balance Sheet	
Cash	25 000										25 000	
Accounts Receivable	40 000										40 000	
Reserve for Bad Debts		200		(A) 800								1 000
Raw Material Inventory 12/31/47	12 000				(b) 12 000							
Goods in Process Inventory 12/31/47	15 000				(a) 15 000							
Finished Goods Inventory 12/31/47	20 000						(L) 20 000					
Land	10 000										10 000	
Buildings	70 000										70 000	
Reserve for Depreciation of Buildings		12 000		(B) 3 500								15 500
Machinery and Equipment	60 000										00 000	
Reserve for Depreciation of M and E		15 000		(C) 6 000								21 000
Furniture and Fixtures	5 000										5 000	
Reserve for Depreciation of F and F		1 500		(D) 750								2 250
Accounts Payable		22 800										22 800
Capital Stock		100 000										100 000
Earned Surplus		71 450								71 450		
Sales		300 000						(i) 300 000				
Returned Sales and Allowances	2 000						(j) 2 000					
Purchases—Raw Material	94 000				(c) 94 000							
Returned Purchases and Allowances		1 500				(d) 1 500						
Freight In	800				(c) 800							
Direct Labor	80 000		(E) 750		(f) 80 750							
Indirect Labor	9 000		(E) 125		(g) 9 125							
Heat, Light, and Power	3 500				(g) 3 500							
Building and Machinery Repairs	300				(g) 300							
Insurance	1 250			(F) 300	(g) 950							
Taxes	1 400				(g) 1 400							
Factory Supplies	3 500				(g) 3 500							
Miscellaneous Factory Expense	2 500				(g) 2 500							
Advertising	9 000						(n) 9 000					
Salesmen's Salaries	20 000		(E) 360				(n) 20 360					
Salesmen's Traveling Expense	8 000						(n) 8 000					
Miscellaneous Selling Expense	2 500						(n) 2 500					
Office Salaries	3 000		(F) 40				(o) 3 040					
Officers' Salaries	18 000						(o) 18 000					
Stationery and Printing	400						(o) 400					
Forward	516 150	524 450	1 275	11 3[illegible]0	223 825	1 500	83 300	300 000		71 450	210 000	1[illegible]7 550

Working Papers—Year Ended December 31, 1948—Concluded

	Trial Balance		Adjustments		Manufacturing		Profit and Loss Statement		Surplus Statement		Balance Sheet	
Forward	516,150	521,150	1,275	11,350	223,825	1,500	83,300	300,000		71,150	210,000	162,550
Office Supplies	300						(c) 300					
Miscellaneous General Expense	700						(o) 700					
Discount on Purchases		1,200						(p) 1,200				
Discount on Sales	2,500						(q) 2,500					
Dividends	6,000								(a) 6,000			
	525,650	525,650										
Bad Debts			(A) 800				(o) 800					
Depreciation:												
Buildings—5%			(B) 3,500		(g) 3,500							
Machinery and Equipment—10%			(C) 8,000		(g) 8,000							
Furniture and Fixtures—15%			(D) 750				(o) 750					
Accrued Salaries and Wages				(E) 1,275								1,275
Unexpired Insurance			(F) 300								300	
			12,625	12,625								
Inventories, December 31, 1948												
Raw Materials						(e) 9,000					(e) 9,000	
Goods in Process						(h) 11,000					(h) 11,000	
Finished Goods								(m) 17,000			(m) 17,000	
Cost of Goods Manufactured						(l) 211,825	(l) 211,825					
					233,325	233,325						
Net Income to Earned Surplus							(r) 18,025			(r) 18,025		
							318,200	318,200				
Surplus, December 31, 1948									83,175			83,175
									89,175	89,175	217,300	217,300

Manufacturing columns

	Debit	Credit
(a) Goods in process—beginning of year	15,000 00	
Raw materials used		
(b) Inventory—beginning of year	12,000 00	
Net cost of materials purchased		
(c) Purchases	94,000 00	
(c) Freight in	800 00	
(d) Returned purchases and allowances		1,500 00
(e) Inventory—end of year		9,000 00
(f) Direct labor	80,750 00	
(g) Manufacturing expenses		
Indirect labor	9,125 00	
Heat, light, and power	3,500 00	
Building and machinery repairs	300 00	
Insurance	950 00	
Taxes	1,400 00	
Factory supplies	3 500 00	
Miscellaneous factory expense	2 500 00	
Depreciation of buildings	3 500 00	
Depr of machinery and equipment	6,000 00	
(h) Goods in process—end of year		11,000 00
(i) Balance—cost of goods manufactured—transferred to debit Profit and Loss column		211 825 00
	233 325 00	233 325 00

Profit and Loss columns.

	Debit	Credit
Net sales		
(i) Sales		300,000 00
(j) Returned sales and allowances	2,000 00	
(k) Finished goods—beginning of year	20,000 00	
(l) Cost of goods manufactured (transferred from manufacturing columns)	211,825 00	
(m) Finished goods—end of year		17,000 00
(n) Selling expenses—totaling	39,860 00	
(o) General expenses—totaling	23,990 00	
(p) Discount on purchases		1,200 00
(q) Discount on sales	2,500 00	
(r) Balance—net income—transferred to Earned Surplus	18 025 00	
	318 200 00	318 200 00

Surplus columns

	Debit	Credit
Surplus at the beginning of the year		71,450 00
(r) Net income		18,025 00
(s) Dividends	6,000 00	
Balance—Earned Surplus, end of the year	83 475 00	
	89 475 00	89 475 00

Balance Sheet columns

Assets, liabilities, and net worth at the end of the year

Apportioned items in the working papers. If an expense charged to one expense account is to be apportioned (as between manufacturing and selling expenses; or among manufacturing, selling, and general expenses) the apportionment may be indicated in the working papers in the manner illustrated below. Observe that, when a portion of an expense is classified as Selling Expense and another portion of the same expense is classified as General Expense, the two portions are identified by the letters *S* and *G*. These letters may also be used if an expense is not apportioned between Selling and General, but the title of the account does not clearly indicate whether the items should be classified as Selling or General.

	Trial Balance	Manufacturing	Profit and Loss
Taxes.................... ...	3,000.00	2,000.00	600.00S 400.00G
Rent of Building...............	6,000.00	5,000.00	1,000.00G

If an account balance is apportioned thus, the journal entries closing the books should give recognition to the apportionment. Thus, if an expense account balance is apportioned to Manufacturing, Selling, and General, a portion of the account balance will be transferred to Manufacturing account in the entry closing the manufacturing expense accounts, a portion will be closed to Profit and Loss in the entry closing the selling expense accounts, and the remainder will be closed to Profit and Loss in the entry closing the general expense accounts.

Closing the books. The journal entries closing the books of a manufacturing company may be grouped as follows:

(I) Entries for adjustments: deferred and accrued items, reserve provisions, and so forth.

(II) Entries to set up a Manufacturing account into which are closed all of the accounts containing information used in determining the cost of goods manufactured.

(III) Entries in Profit and Loss and Surplus.

The entries closing the books of The *A B C* Company are shown below. These entries are keyed, by letters, to the amounts shown in the working papers. This is done for clearness of presentation in this chapter; such letters would not be used in actual books of account.

Adjustments. The reserve for bad debts is increased to $1,000.00 by the following entry:

(A) Bad Debts..............	800.00	
Reserve for Bad Debts..................		800.00
To increase the reserve to $1,000.00.		

Depreciation of the fixed assets is provided for by the following entries:

(B) *Depreciation of Buildings*	3,500 00	
Reserve for Depreciation of Buildings ..		3,500 00
To provide for depreciation at 5% per annum.		
(C) *Depreciation of Machinery and Equipment*	6,000 00	
Reserve for Depreciation of Machinery and Equipment		6,000 00
To provide for depreciation at 10% per annum.		
(D) Depreciation of Furniture and Fixtures	750 00	
Reserve for Depreciation of Furniture and Fixtures		750 00
To provide for depreciation at 15% per annum.		

Accrued salaries and wages are recorded by the following entry:

(E) Direct Labor	750 00	
Indirect Labor	125 00	
Salesmen's Salaries	360 00	
Office Salaries	40 00	
Accrued Salaries and Wages		1,275 00
Salaries and wages accrued and unpaid at end of year		

Unexpired insurance is deferred by the following entry:

(F) Unexpired Insurance	300 00	
Insurance		300 00
Premiums unexpired		

Manufacturing account entries. The following entries produce a balance in the Manufacturing account representing the cost of goods manufactured during the year.

Goods in process at the beginning of the year:

(a) Manufacturing	15,000 00	
Goods in Process Inventory		15,000 00
To charge Manufacturing account with the cost of goods in process at the beginning of the year		

Materials used during the year:

(b) Manufacturing	12,000 00	
Raw Material Inventory		12,000 00
To charge Manufacturing account with the cost of raw materials on hand at the beginning of the year		
(c) Manufacturing	94,800 00	
Purchases—Raw Material		94,000 00
Freight In		800 00
To close the Purchases and Freight accounts		

(d)	Returned Purchases and Allowances..........	1,500.00	
	Manufacturing..........		1,500.00
	To close the Returned Purchases and Allowances account.		
(e)	Raw Material Inventory	9,000.00	
	Manufacturing		9,000.00
	To set up the inventory of raw materials at the end of the year.		

Direct labor costs:

(f)	Manufacturing	80,750.00	
	Direct Labor...		80,750.00
	To charge Manufacturing account with the cost of direct labor.		

Manufacturing expenses:

(g)	Manufacturing	30,775.00	
	Indirect Labor		9,125.00
	Heat, Light, and Power		3,500.00
	Building and Machinery Repairs		300.00
	Insurance		950.00
	Taxes		1,400.00
	Factory Supplies..		3,500.00
	Miscellaneous Factory Expense		2,500.00
	Depreciation of Buildings.		3,500.00
	Depreciation of Machinery and Equipment		6,000.00
	To close the manufacturing expense accounts.		

Goods in process at the end of the year:

(h)	Goods in Process Inventory	11,000.00	
	Manufacturing		11,000.00
	To set up the goods in process inventory at the end of the year.		

The balance in the Manufacturing account now represents the cost of goods manufactured during the year.

Profit and loss and surplus entries. Entries to credit Profit and Loss with net sales:

(i)	Sales	300,000.00	
	Profit and Loss		300,000.00
	To close the Sales account.		
(j)	Profit and Loss	2,000.00	
	Returned Sales and Allowances		2,000.00
	To close the Returned Sales and Allowances account.		

Entries to debit Profit and Loss with the cost of goods sold:

(k)	Profit and Loss	20,000.00	
	Finished Goods Inventory.		20,000.00
	To charge Profit and Loss with the inventory of finished goods at the beginning of the year.		

(l) Profit and Loss	211,825 00	
Manufacturing		211,825 00
To close the Manufacturing account, and to charge Profit and Loss with the cost of goods manufactured during the year		
(m) *Finished Goods Inventory*	17,000 00	
Profit and Loss		17,000 00
To set up the inventory of finished goods at the end of the year		

Entry for selling expenses

(n) Profit and Loss	39,860 00	
Advertising		9,000 00
Salesmen's Salaries		20,360 00
Salesmen's Traveling Expense		8,000 00
Miscellaneous Selling Expense		2,500 00
To close the selling expense accounts		

Entry for general expenses

(o) Profit and Loss	23,990 00	
Office Salaries		3,040 00
Officers' Salaries		18,000 00
Stationery and Printing		400 00
Office Supplies		300 00
Miscellaneous General Expense		700 00
Bad Debts		800 00
Depreciation of Furniture and Fixtures		750 00
To close the general expense accounts		

Entries for other income and expense

(p) Discount on Purchases	1,200 00	
Profit and Loss		1,200 00
To close		
(q) Profit and Loss	2,500 00	
Discount on Sales		2,500 00
To close		

Entries in Surplus

(r) Profit and Loss	18,025 00	
Earned Surplus		18 025 00
To transfer the net income to Surplus		
(s) Earned Surplus	6,000 00	
Dividends		6,000 00
To charge Surplus with dividends paid during the year		

Manufacturing and Profit and Loss accounts. The Manufacturing account and the Profit and Loss account are shown on pages 317 and 318. The entries in these accounts are cross-referenced to the journal entries by letters. This is done for purposes of explanation in this chapter, letters would not appear in actual accounts.

Trace all the foregoing closing journal entries into the ledger accounts, since this procedure will clarify the process of closing the books of a manufacturing company. The Manufacturing account contains the following elements:

Goods in process at beginning	Debit entry a
Materials used	Net debit of entries b, c, d, and e
Direct labor	Debit entry f
Manufacturing expenses	Debit entries g
Less goods in process at end	Credit entry h
Balance—cost of goods manufactured	Credit entry i

Manufacturing

Date		Item	Ref.	Amount	Date		Item	Ref.	Amount
1918					1918				
Dec.	31	Goods in Process Inventory, Dec. 31, 1917	a	15,000.00	Dec.	31	Returned Purchases and Allowances	d	1,500.00
	31	Raw Material Inventory, Dec. 31, 1917	b	12,000.00		31	Raw Material Inventory, Dec. 31, 1918	e	9,000.00
	31	Raw Material Purchases	c	91,000.00		31	Goods in Process Inventory, Dec. 31, 1918	h	11,000.00
	31	Freight In	c	800.00		31	Cost of Goods Mfd.—to Profit and Loss	i	211,825.00
	31	Direct Labor	f	80,750.00					
	31	Indirect Labor	g	9,125.00					
	31	Heat, Light, and Power	g	3,500.00					
	31	Building and Machinery Repairs	g	300.00					
	31	Insurance	g	950.00					
	31	Taxes	g	1,400.00					
	31	Factory Supplies	g	3,500.00					
	31	Miscellaneous Factory Expense	g	2,500.00					
	31	Depreciation of Buildings	g	3,500.00					
	31	Depreciation of Machinery and Equipment	g	6,000.00					
				233,325.00					233,325.00

Profit and Loss

Date		Item	Ref.	Amount	Date		Item	Ref.	Amount
1948					1948				
Dec	31	Returned Sales and Allowances	j	2,000.00	Dec	31	Sales	l	300,000.00
	31	Finished Goods Inventory, Dec 31, 1947	k	20,000.00		31	Finished Goods Inventory, Dec 31, 1948	m	17,000.00
	31	Cost of Goods Manufactured	l	211,825.00		31	Discount on Purchases	p	1,200.00
	31	Advertising	n	9,000.00					
	31	Salesmen's Salaries	n	20,360.00					
	31	Salesmen's Traveling Expense	n	8,000.00					
	31	Miscellaneous Selling Expense	n	2,500.00					
	31	Office Salaries	o	3,040.00					
	31	Officers' Salaries	o	18,000.00					
	31	Stationery and Printing	o	400.00					
	31	Office Supplies	o	300.00					
	31	Miscellaneous General Expense	o	700.00					
	31	Bad Debts	o	800.00					
	31	Depreciation of Furniture and Fixtures	o	750.00					
	31	Discount on Sales	q	2,500.00					
	31	Net Income—To Surplus	r	18,025.00					
				318,200.00					318,200.00

CHAPTER 23

Miscellaneous Matters

Numerical Chart of Accounts

Account numbers. Most ledgers are kept on cards or in loose-leaf binders. Each account is given a number, and the cards or sheets are kept in numerical order.

It is advisable to number accounts in a systematic manner so that the account numbers indicate classifications and relationships. Numbering systems differ, but the following chart of accounts illustrates the general principle.

Observe that each account number contains four digits, and that *the first digit at the left indicates a main classification, as shown* below:

1--- Assets and related reserves.
2--- Liabilities and deferred credits.
3--- Net worth.
4--- Sales and related accounts.
5--- Accounts with manufacturing costs: materials, labor, and manufacturing expenses.
6--- Selling expenses.
7--- General expenses.
8--- Other income and expense.
9--- Closing accounts: Manufacturing and Profit and Loss.

The second digit in a general ledger account number indicates a main subclassification, thus:

11-- Current assets and related reserves.
12-- Other assets.
13-- Fixed assets and related reserves.
14-- Prepaid expenses and deferred charges.

The third and fourth digits indicate further subclassifications and relationships, thus:

1130 Notes Receivable.
1135 Accrued Interest on Notes Receivable.
1139 Notes Receivable Discounted.

The third and fourth digits are not assigned haphazardly, but in many instances are selected for reasons of consistency, or to show relationships.

As illustrations of numbers chosen for purposes of consistency, observe the following account numbers The first digit indicates whether the account represents an asset or a liability, the fact that the item is current is indicated by the second digit, the final 20 indicates an account receivable or payable, the final 30 indicates a note

1120 Accounts Receivable
2120 Vouchers Payable

1130 Notes Receivable
2130 Notes Payable

Also observe that offset accounts, representing deductions from related accounts, are numbered with a final 9

1120 Accounts Receivable
1129 Reserve for Bad Debts

1331 Machinery and Equipment
1339 Reserve for Depreciation—Machinery and Equipment

2350 6% First Mortgage Bonds
2359 Unissued Bonds

3171 Preferred Stock Authorized
3179 Unissued Preferred Stock

3201 Earned Surplus
3279 Dividends on Preferred Stock
3289 Dividends on Common Stock

As an illustration of account numbers assigned to show relationships, observe the following

The account with bonds payable is

2350 6% First Mortgage Bonds

Observe the numbers of the related accounts.

1250 Sinking Fund Cash
1251 Sinking Fund Securities
1450 Bond Discount
2150 Accrued Bond Interest
3250 Sinking Fund Reserve
8250 Bond Interest

As another illustration of account numbers assigned to show relationships, observe the following

The capital stock accounts are numbered 31--, the preferred stock accounts are numbered 317-, and the common stock accounts are numbered 318

Observe the numbers of the following related accounts. The digit in the third position indicates the class of stock; the fourth digits have the same significance in both groups of accounts.

3171 Preferred Stock Authorized.
3175 Preferred Stock Subscribed.
3179 Unissued Preferred Stock.
1275 Subscriptions to Preferred Stock.
3279 Dividends on Preferred Stock.

3181 Common Stock Authorized.
3185 Common Stock Subscribed.
3189 Unissued Common Stock.
1285 Subscriptions to Common Stock.
3289 Dividends on Common Stock.

Another illustration of account numbers assigned to show relationships is:

1455 Unexpired Insurance.
5355 Insurance (manufacturing expense).
6055 Insurance (selling expense).
7055 Insurance (general expense).

Illustrative chart of accounts. The following chart of accounts will be used in a practice set accompanying the text:

CURRENT ASSETS:

1111 Cash.
1112 Petty Cash.

1120 Accounts Receivable.
1129 Reserve for Bad Debts.

1130 Notes Receivable.
1135 Accrued Interest on Notes Receivable.
1139 Notes Receivable Discounted.

1151 Finished Goods.
1161 Goods in Process.
1171 Raw Materials.

OTHER ASSETS:

1232 T. R. Price, Drawings.
1233 Weber and Fields.

1250 Sinking Fund Cash.
1251 Sinking Fund Securities.

1275 Subscriptions to Preferred Stock.
1285 Subscriptions to Common Stock.

Fixed Assets

1311 Land

1321 Buildings
1329 Reserve for Depreciation—Buildings

1331 Machinery and Equipment
1339 Reserve for Depreciation—Machinery and Equipment

1341 Tools
1349 Reserve for Depreciation—Tools

1351 Delivery Equipment
1359 Reserve for Depreciation—Delivery Equipment

1361 Furniture and Fixtures
1369 Reserve for Depreciation—Furniture and Fixtures

1371 Patents
1379 Reserve for Patent Expiration

1381 Goodwill

Prepaid Expenses and Deferred Charges:

1411 Factory Supplies Inventory
1412 Stationery and Printing Inventory.
1415 Coal Inventory
1450 Bond Discount
1451 Prepaid Garage Rent
1455 Unexpired Insurance

Current Liabilities

2120 Vouchers Payable
2129 Freight to be Deducted

2130 Notes Payable
2135 Accrued Interest on Notes Payable.

2150 Accrued Bond Interest
2151 Accrued Payroll

2161 Federal Taxes Withheld from Employees.
2162 O A B Taxes Payable
2163 State Unemployment Taxes Payable
2164 Federal Unemployment Taxes Payable.
2165 Accrued Taxes Payable—General
2166 Reserve for Federal Income Tax.

2179 Dividends Payable—Preferred
2189 Dividends Payable—Common.

Other Liabilities

2201 Lane Brothers

Fixed Liabilities:

2310 Mortgage Payable—6%.
2320 Mortgage Payable—5%.

2350 6% First Mortgage Bonds.
2359 Unissued Bonds.

Deferred Credits:

2421 Rent Collected in Advance.
2435 Interest Collected in Advance.

Net Worth:

3171 Preferred Stock Authorized.
3175 Preferred Stock Subscribed.
3179 Unissued Preferred Stock.

3181 Common Stock Authorized.
3185 Common Stock Subscribed.
3189 Unissued Common Stock.

3201 Earned Surplus.
3250 Sinking Fund Reserve.

3279 Dividends on Preferred Stock.
3289 Dividends on Common Stock.

Sales and Related Accounts:

4001 Sales.
4009 Returned Sales and Allowances.

Purchases and Related Accounts:

5171 Purchases—Raw Materials.
5172 Freight In.
5179 Returned Purchases and Allowances.

Direct Labor:

5201 Direct Labor.

Manufacturing Expenses:

5300 Manufacturing Expense (Control).

5301 Indirect Labor.
5302 Superintendence.
5311 Factory Supplies.
5315 Heat, Light, and Power.
5328 Repairs to Buildings.
5329 Depreciation—Buildings.
5338 Repairs to Machinery and Equipment.
5339 Depreciation—Machinery and Equipment.
5349 Depreciation—Tools.

5355 Insurance
5360 Taxes
5379 Patent Expiration Expense
5390 Miscellaneous Factory Expense

Selling Expenses

6000 Selling Expense (Control)

6001 Salesmen s Salaries
6002 Commissions
6003 Salesmen s Traveling Expenses
6004 Delivery Salaries
6051 Delivery Expense
6055 Insurance
6059 Depreciation—Delivery Equipment
6061 Freight Out
6063 Freight on Returned Sales
6070 *Advertising*
6090 Miscellaneous Selling Expense

General Expenses

7000 General Expense (Control)

7001 Officers Salaries
7002 Office Salaries
7011 Office Supplies
7012 *Stationery and Printing*
7029 Bad Debts
7055 Insurance
7060 Taxes
7069 Depreciation—Furniture and Fixtures
7071 Postage
7081 Collection and Exchange
7090 Miscellaneous General Expense

Other Income

8101 Discount on Purchases
8121 Rent Income
8135 Interest Income
8151 Delivery Income

Other Expenses

8201 Discount on Sales
8235 Sundry Interest Expense
8240 Mortgage Interest
8250 Bond Interest
8266 Federal Income Tax

Closing Accounts:

9001 Manufacturing account.
9002 Profit and Loss.

Organization of ledger. If the chart of accounts is well planned, the accounts will be arranged in the ledger in the sequence in which their balances will appear in the statements at the end of the period. For instance, all current asset accounts will be in one section of the ledger, and they will be arranged in the order in which they appear in the balance sheet. Since the fixed assets will appear in the balance sheet after the current assets, their accounts should appear in the ledger after those of the current assets.

In constructing a chart of accounts, it is desirable to leave several unassigned numbers in each group, to provide for other accounts which may be added later. If new accounts are added, they should be given numbers which will place them in the ledger in the sequence in which their balances will appear in the statements.

Use of account numbers instead of account names. Space can frequently be saved in the books of original entry by providing a narrow Account Number column instead of a wide Account Name column. The following paragraphs show the use of such Account Number columns in the:

Voucher register.
Cash disbursements books.
Cash receipts book.

Voucher register. Special columns are provided in the voucher register for the accounts most frequently debited. Previously it has been necessary to write (in the Sundry Accounts Debited section) the names of accounts infrequently debited. The writing of these account names can be avoided by using an Account Number column instead of an Account Name column, thus:

Sundry Accounts Debited		
Acct. No.	✓	Amount
1321		1,000 00
S235		25 00

Referring to the schedule of accounts, we find that account 1321 is Buildings and account S235 is Sundry Interest Expense.

Since the bookkeeper has used the account number to indicate the account to which the posting *is to be made*, it will be confusing to use the account number also to show that the posting *has been*

made. Therefore, a check mark is used for that purpose. After the entries have been posted, the Sundry Accounts Debited section will appear as follows:

Sundry Accounts Debited		
Acct. No	√	Amount
1321	√	1,000 00
8235	√	25 00

The only credit column in the voucher registers previously illustrated was Vouchers Payable. Occasionally it is necessary to credit some other account, and in such cases entries might be made in red ink in the Sundry Accounts Debited section.

To avoid such red ink entries, it is advisable to provide a sundry credit column as well as a sundry debit column in the voucher register, as illustrated below

Sundry Accounts					
Debits			Credits		
Acct No	√	Amount	Acct No	√	Amount

Cash disbursements book. The cash disbursements book (check register) previously illustrated in connection with the voucher system contained only three columns.

Debit:
  Vouchers Payable
Credits
  Discount on Purchases
  Cash

Occasionally it is necessary to debit or credit other accounts at the time of paying vouchers, therefore, it is desirable to include a Sundry Accounts debit section and a Sundry Accounts credit section in the cash disbursements book. The illustration on page 327 shows how such columns may be used.

In the first two transactions it is assumed that payments were made by bank drafts, and that the bank charged an exchange fee, the checks issued in purchasing the drafts were, therefore, larger than the amounts of the vouchers being paid. The charges to Collection and Exchange are indicated by the debits to account 7081.

The last two entries show a method of dealing with returns and allowances by crediting Returned Purchases and Allowances (account 5179) at the time of issuing the check in payment of the voucher.

Since the bookkeeper has entered account numbers in the Account Number columns of the Sundry Accounts sections to indicate the accounts to which postings are to be made, he will use check marks to indicate that postings have been made.

Cash Disbursements Book

Check No.	Date		Payee	Voucher Number	Debits: Vouchers Payable (2120)	Debits: Sundry Accounts: Acct. No.	Debits: Sundry Accounts: ✓	Debits: Sundry Accounts: Amount	Credits: Sundry Accounts: Acct. No.	Credits: Sundry Accounts: ✓	Credits: Sundry Accounts: Amount	Credits: Discount on Purchases (8101)	Credits: Cash (1111)
	19--												
356	Dec.	13	J. H. Kelly	317	350 00	7081		15					350 15
357		15	R. L. Peterson	318	100 00	7081		20				8 00	392 20
358		19	R. K. Gunderson	311	500 00				5179		25 00		475 00
359		20	T. O. French	358	800 00				5179		10 00	16 00	774 00

Cash receipts book. *The cash receipts books previously illustrated have contained a Sundry Accounts credit section, it may also be desirable to have a Sundry Accounts debit section.*

These two Sundry Accounts sections can be provided with columns to show account numbers instead of account names. The cash receipts book may then appear somewhat as shown below:

General Cash Receipts Book

Date		Explanation	Credits: Sundry Accounts Acct No	✓	Credits: Sundry Accounts Amount	Credits: Sales (4001)	Credits: Interest Income (8135)	Credits: Accts Receivable (1120)	Debits: Sundry Accounts Acct No	✓	Debits: Sundry Accounts Amount	Debits: Discount on Sales (8201)	Debits: Freight Out (0001)	Debits: Cash (1111)
19— July	1	Issued 500 shares of stock	3189		50,000.00									50,000.00
	7	Cash sales				500.00								500.00
	10	Collections						1,500.00				30.00		1,470.00
	15	J B Edwards—note & interest	1130		2,400.00		4.00							2,404.00
	17	*Collections*						1,000.00	7031		.30			999.70
	20	*Collections*						3,000.00				25.00	15.00	2,960.00

The Explanation column does not contain the names of any accounts: the accounts to be debited and credited are indicated either by entering the amounts in special columns, or by entering account numbers in the Account Number columns of the Sundry Accounts credit or Sundry Accounts debit sections. Account 3180 is Unissued Common Stock; account 1130 is Notes Receivable; account 7081 is Collection and Exchange.

Attention is directed to the entries explained as *Collections*. In a large business it may be desirable to use a separate cash receipts book for collections from customers, if many such collections are received. This book may be ruled as in the following illustration, which shows the collections for July 20:

Cash Receipts—Customers

Date	√	Name	Accounts Receivable	Discount	Freight	Cash
19—						
July 20		F. R. Barnes	800 00	8 00		792 00
		G. D. Sampson	300 00			300 00
		George Dawson	1,600 00	16 00	9 00	1,575 00
		James G. Flodin	100 00	1 00	2 00	97 00
		David Bascom	200 00		4 00	196 00
			3,000 00	25 00	15 00	2,960 00

The items in the Accounts Receivable column are posted to the subsidiary accounts receivable ledger, the posting being indicated by check marks in the (√) column. The daily totals may be carried to the general cash receipts book, in the manner illustrated: in this case, postings to the debit of Accounts Receivable control, Discount on Sales, Freight Out and Cash will be made from the general cash receipts book. Or the daily totals of the columns of the cash receipts—customers book need not be entered in the general cash receipts book, in which case monthly totals of the four columns of the cash receipts—customers book will be posted to the general ledger. This latter procedure will be used in the practice set.

Use of account numbers and check marks. In preceding chapters, ledger page numbers have been entered in books of original entry to indicate that postings have been made to general ledger accounts, and check marks have been used to indicate that postings have been made to subsidiary records. Bookkeepers sometimes use check marks to indicate that debits or credits to certain accounts are not to be posted.

Ledger page numbers have always indicated that postings have been made, but ledger account numbers are now to be used to indicate accounts to which postings are to be made.

If an account number may show either where an entry is to be posted or that an entry has been posted, and if a check mark may indicate either that an entry has been posted or that it is not to be posted, confusion will result. Unfortunately, there is no universally accepted method of avoiding this confusion. In the remaining chapters of this book the following procedure is followed:

Account numbers (with or without names) indicate accounts to which postings are to be made.
Check marks indicate that postings have been made.

Thus, the account name and number are entered at the head of each column which is to be posted in total. (See preceding illustrations of voucher register, cash disbursements book, and cash receipts book.) When the column total is posted, indicate that fact by putting a check mark at the foot of the column, below the total.

In the Sundry Accounts sections of the books of original entry in which such sections may be used, indicate, by account numbers only, the accounts to which postings are to be made. Indicate that postings have been made by entering check marks in the (√) column.

In writing journal entries, show the account number (or number and name); after posting, enter a check mark in the (√) or L F column.

Thus, an account number will show the account to which the posting is to be made, and a check mark will indicate that the posting has been made.

Postings to subsidiary records will also be indicated by check marks.

If an entry or column total is not to be posted, that fact may be indicated by an x in the (√) or L F column, or below the column.

Expense Controls

Controlling accounts. In studying controlling accounts with customers and creditors, you learned that controlling accounts are introduced into the accounting system when the work becomes so heavy that it must be divided.

In a very large business, the controlling account procedure can also be applied to expense accounts, thus providing for further subdivision of the bookkeeping work. Controlling accounts with various classes of expense can be kept in the general ledger, and the details can be kept in a subsidiary expense ledger or other record.

Referring to the account classification, let us assume that expense controlling accounts are to be kept in the general ledger, and detail accounts are to be kept in a subsidiary record.

The voucher register will contain a debit section for each of the three controlling accounts (Numbers 5300, 6000, and 7000), and each of these controlling account sections will be provided with three subcolumns: Account Number, (√), and Amount, as shown on pages 332 and 333.

During the month, the bookkeeper in charge of the subsidiary expense record posted the individual entries from the expense control columns, and indicated by check marks in the (√) column between the account number and the amount, that the postings were made. Thus, the check marks in the part of the register shown indicate that he has posted to the following accounts:

5311	Factory Supplies	$ 65.00
6070	Advertising	200.00
6061	Freight Out	25.00
5301	Indirect Labor	150.00
6001	Salesmen's Salaries	228.00
6004	Delivery Salaries	200.00
7002	Office Salaries	200.00

The general ledger bookkeeper posted from the voucher register as follows:

AT THE END OF THE MONTH—COLUMN TOTALS:

Credits:		
Vouchers Payable	2120	$20,050.00
Debits:		
Purchases	5171	$14,590.00
Freight In	5172	375.00
Manufacturing Expense (Control)	5300	995.00
Selling Expense (Control)	6000	2,060.00
General Expense (Control)	7000	870.00

DURING THE MONTH—ENTRIES IN SUNDRY ACCOUNTS SECTION:

Debits:		
Notes Payable	2130	500.00
Interest Expense	8235	10.00
Direct Labor	5201	650.00
		$20,050.00

Since the subsidiary ledger bookkeeper has posted all the items in the Manufacturing Expense column, the sum of the balances in the subsidiary manufacturing expense accounts should equal the balance in the Manufacturing Expense controlling account. The same agreement should exist between the Selling Expense controlling account and the subsidiary selling expense record, and between the General Expense controlling account and the subsidiary general expense record.

Voucher

Vo No	Date		Payee	Explanation	Terms	Paid Date		Ck No	Credit Vouchers Payable 2120	Debits Purchases 5171	Debits Freight In 5172
	19—					19—					
1	July	1	J B White	Invoice July 1	2/10 n/30	July	11	12	3 000 00	3 000 00	
2		2	C N W Ry				2	1	8 00		8 00
3		3	Payson & Co	Invoice 1361	Cash		3	2	65 00		
4		3	C R Maynard	Circulars			3	3	200 00		
5		3	*Basset & Co*	*Note and interest*			3	4	*510 00*		
6		3	Osborne & Co	Invoice July 2	1/10 n/30		12	14	850 00	850 00	
7		5	C N W Ry				5	5	25 00		
115		31	Payroll				31	98	1 428 00		
									20 050 00	14 500 00	375 00
									√	√	√

Subsidiary records The subsidiary expense records may be kept in columnar form, thus

Selling Expense Analysis Record

Date	Vo No	Ref	6001	6003	6004	6051	6059	6061	6070	6090
19—										
July 3	4								200 00	
5	7							25 00		
7	13		100 00							
8	21							45 00		
9	28					50 00				
11	39			127 00						
15	46		250 00		200 00					
19	71		225 00							
23	82					240 00				
26	91							32 00		
28	99			138 00						
31	115		228 00		200 00					
31		J2					25 00			
	Total		803 00	265 00	400 00	290 00	25 00	102 00	200 00	

The last entry, which is for depreciation of delivery equipment, was made in the journal and was posted to the analysis record and also to the controlling account The "Ref" column is intended to show the source of all entries not posted from the voucher register

Credits in subsidiary expense analysis columns can be indicated by red ink entries

The controlling account with Selling Expense appears as follows

Selling Expense (Control) 6000

19—								
July 31		VR1	2 060 00					
31		J2	25 00					

Register

Debits									Sundry Accounts						Remarks
Manufacturing Expense 5300			Selling Expense 6000			General Expense 7000			Debit			Credit			
Acct No.	√	Amount	Acct No.	√	Amount	Acct No	√	Amount	Acct No	√	Amount	Acct No	√	Amount	
5311	√	65.00													
			6070	√	200.00										
									2170	√	500.00				
									8215	√	10.00				
			6051	√	25.00										
5301	√	150.00	6001	√	228.00	7002	√	200.00	5201	√	650.00				
			6001	√	200.00										
		995.00			2,060.00			870.00			1,160.00				
		√			√			√							

The subsidiary expense ledger bookkeeper prepares a summary of the selling expense accounts at the end of the month in the following form:

Selling Expenses, July, 19—

6001	Salesmen's Salaries	$ 803.00
6003	Salesmen's Traveling Expense	265.00
6004	Delivery Salaries.	400.00
6051	Delivery Expense . . .	290.00
6059	Depreciation—Delivery Equipment.	25.00
6061	Freight Out	102.00
6070	Advertising.	200.00
		$2,085.00

This summary is prepared for two reasons: first, to prove that the subsidiary record is in agreement with the controlling account; second, to furnish the general ledger bookkeeper with the details that he will require for the preparation of the profit and loss statement.

The subsidiary records and monthly summaries of manufacturing and general expenses may be prepared in a similar manner.

Posting from vouchers. If desired, the postings to the subsidiary expense records can be made directly from the vouchers instead of from the voucher register. If this is done, the Account Number and the (√) columns will not be needed in the expense controlling account sections of the voucher register.

Use of account numbers on vouchers. In the voucher illustrated on page 207, the names of the accounts most frequently debited were printed on the back of the voucher, and spaces were left in which to write the names of other accounts as required. It may be desirable to print account numbers instead of names on the back of the voucher. Since so much less space is required for numbers

than for names, the back of the voucher can contain more printed account numbers than account names, and thus reduce the amount of writing to be done by the bookkeeper.

Note Registers as Books of Original Entry

Notes receivable register. If there are many transactions involving notes and drafts, the Notes Receivable and Notes Payable accounts may be controlling accounts and the note registers may be designed for use as books of original entry and subsidiary records rather than as merely supplementary memorandum records When the note registers are used as books of original entry, they may be called the *notes receivable journal* and the *notes payable journal*

The illustration on page 335 shows how the notes receivable register may be used as a book of original entry in which to record the receipt of notes and acceptances receivable

The total of the Accounts Receivable column is posted to the credit of the Accounts Receivable controlling account postings to the credit of individual accounts in the subsidiary ledger are made as indicated by the check marks at the left of the names, and as more fully explained later

The total of the Notes Receivable column is posted to the debit of the Notes Receivable controlling account Since there are occasional interest and discount adjustments to be made in settling accounts by notes, space is provided in the Sundry Accounts columns for miscellaneous debits and credits

The entries in the notes receivable register are explained below The debits and the credits in the register take the place of entries which would otherwise be made in the journal

First entry

On July 2 we received a 30 day, 6% note dated July 1 from A R Lukins, the maker We credited Lukins (the check mark in the L F column indicates the posting to his account) and Accounts Receivable control Notes Receivable account was debited

Second entry

On July 6 we received a 60 day note from G C Walker with interest for 60 days at 6% included in the face The note was received to apply on account The entry in the register for the receipt of this note contained the following debits and credits

Debit	Notes Receivable	1 010 00	
Credit	Accounts Receivable (and Walker)		1 000 00
	Interest Income (account 8135)		10 00

(Left Page)

Notes Receivable Register

Line	Date Received	Date Made or Accepted	N A	Maker or Drawer ✓	Maker or Drawer Name	Drawer or Endorser ✓	Drawer or Endorser Name	Credit Accounts Receivable 1120	Sundry Accounts Debit Acct. No.	Debit ✓	Debit Amount	Sundry Accounts Credit Acct. No.	Credit ✓	Credit Amount	Debit Notes Receivable 1130
	19-	19													
1	July	2 July	1 N	✓	A. R. Lukins			500.00							500.00
2	6	6	N	✓	G. C. Walker.			1,000.00				8135	✓	10.00	1,010.00
3	11	1	N		Ralph Morton	✓	C. D. Perkins	991.67				8135	✓	8.33	1,000.00
4	11	11	N	✓	James Hudson			500.00	8201	✓	5.00				495.00
5	25	23	A	✓	C. F. Wilson.....		Ourselves	300.00							300.00
6								3,291.67 (✓)			5.00			18.33	3,305.00 (✓)
7															

Notes Receivable Register

(Right Page)

Line	Where Payable	Time Mo.	Time Da.	Int. Rate	Year	J	F	M	A	M	J	J	A	S	O	N	D	Discounted Date	Discounted With Whom	Date Collected		Remarks
																				19-		
1	Our office		30	6%	19							31								July	31	
2	Our office		60	6% in Face	19									1								
3	Merchants National		60		19								30									
4	Our office		30	6%	19								13									
5	Home National—Atlanta		30S		19								22									
6																						
7																						

(The entries in the N-A column indicate whether the paper is a note or an acceptance.)

Third entry

On July 11 we received from C D Perkins a note signed by Ralph Morton due in 60 days from July 1, without interest, for $1 000 00 Although Morton was the maker of the note, we credited Perkins because we received it from him by endorsement We credited him with the discounted value of the note—face less 6% interest for 50 days The entry in the register was

Debit	Notes Receivable	1 000 00	
Credit	Accounts Receivable (and Perkins)		991 67
	Interest Income (account 813a)		8 33

Fourth entry

James Hudson purchased merchandise from us on July 14, terms 1/10 n/60 We allowed him to deduct the 1% discount in consideration of his giving us a 30 day interest-bearing note The entry in the register for the receipt of the note was

Debit	Notes Receivable	495 00	
	Discount on Sales (account 8201)	5 00	
Credit	Accounts Receivable (and Hudson)		500 00

Fifth entry

On July 21 we sold merchandise to C F Wilson under terms requiring him to accept a 30-day draft The acceptance was received on July 25 it had been accepted on July 23, and was payable 30 days after sight The acceptance was made payable at the Home National Bank of Atlanta The entry was

Debit	Notes Receivable	300 00	
Credit	Accounts Receivable (and Wilson)		300 00

The postings to the general ledger from the register were

	Debit	Credit
During the month—entries in Sundry Accounts columns		
Discount on Sales—account 8201	$ 5 00	
Interest Income—account 813a—two entries		$ 18 33
At the end of the month		
Notes Receivable—account 1130	3 305 00	
Accounts Receivable—account 1120		3 291 67
Total debits and credits to general ledger	$3 310 00	$3 310 00

Accounts in the accounts receivable subsidiary ledger were credited as indicated by the check marks at the left of the names

Entries for the collection or the discounting of notes receivable would be made in the cash receipts book in the usual way, with notations in the memorandum columns of the register The cash receipts book should have a Notes Receivable credit column to facilitate posting to the controlling account

Notes payable register. The entries in the notes payable register on page 338 are explained in the following comments:

First entry:

On November 1 we gave a 60-day, 6% note for $5,000.00 to Sidney Welch to apply on account.

Debit:	Vouchers Payable (No. 316).	5,000.00	
Credit:	Notes Payable .		5,000.00

Second entry:

On November 3 we accepted a 30-day sight draft for $1,000.00, without interest, drawn by George Mason, payable to himself.

Debit:	Vouchers Payable (No. 321)	1,000.00	
Credit:	Notes Payable...		1,000.00

Third entry:

On November 7 we gave a note to James Snowden, to whom we owed $2,000.00; the note was due in 60 days, and the face included interest at 6% for 60 days.

Debit:	Vouchers Payable (No. 330)	2,000.00	
	Sundry Interest Expense (account 8235).	20.00	
Credit:	Notes Payable...		2,020.00

Fourth entry:

On November 12, Fred Hunt, to whom we were indebted, drew a 30-day sight draft on us for $500.00, payable to F. R. Norton. We accepted it.

Debit:	Vouchers Payable (No. 336)	500.00	
Credit:	Notes Payable.........		500.00

Fifth entry:

On November 19 we purchased $2,000.00 worth of merchandise from Holmes & Company, terms 2% in ten days. With their consent, we took the discount by issuing them a 10-day note:

Invoice	$2,000.00
Less 2% discount....	40.00
Note due in 10 days..... .	$1,960.00

The debits and the credits in the notes payable register were:

Debit:	Vouchers Payable (No. 350). .	2,000.00	
Credit:	Discount on Purchases (account 8101)		40.00
	Notes Payable....		1,960.00

Sixth entry:

On November 25 we borrowed from the bank, issuing a 60-day, non-interest note for $5,000.00, and receiving $4,950.00 as the pro-

(Left Page)

Notes Payable Register

Line	Date of Entry		Date Made or Accepted		N A	Payee ✓	Payee Name	Endorser or Drawer ✓	Endorser or Drawer Name	Debit Vouchers Payable 2120 No	✓	Amount	Sundry Accounts Debit Acct No	✓	Amount	Sundry Accounts Credit Acct No	✓	Amount	Credit Notes Payable 2130
	19—		19—																
1	Nov	1	Nov	1	N	✓	Sidney Welch			316	✓	5 000 00							5 000 00
2		3		3	A	✓	George Mason			321	✓	1 000 00							1 000 00
3		7		7	N	✓	James Snowden			330	✓	2 000 00	8235	✓	20 00				2 020 00
4		12		12	A		F R Norton	✓	Fred Hunt	336	✓	500 00							500 00
5		19		19	N	✓	Holmes & Company			350	✓	2 000 00				8101	✓	40 00	1 960 00
6		25		25	N		First National Bank						CR	×	4 950 00				
7													8235	✓	50 00				5 000 00
8												10 500 00			5 020 00			40 00	15 180 00
9												(✓)							(✓)

Notes Payable Register

(Right Page)

Line	Where Payable	Time Mo	Time Da	Int Rate	When Payable Year	J	F	M	A	M	J	J	A	S	O	N	D	Date Paid		Remarks
																		19—		
1	His office		60	6%	19—												31			
2	His office		30		19—												3			
3	Farmers Bank		60	In Face	19—	6														
4	First National Bank		30	Dis	19—												12			
5	Their office		10		19—											29		Nov	29	
6	First National Bank		60		19—	21														See cash book entry
7																				
8																				
9																				

ceeds. This transaction required a cash receipts book entry as well as a note register entry. These entries were as follows:

	Entries Not Posted	Entries Posted Debits	Entries Posted Credits
Notes payable register.			
Debit: Memo in Sundry Accounts column......	4,950.00		
Sundry Interest Expense (account 8235)		50.00	
Credit: Notes Payable			5,000.00
Cash receipts book.			
Debit: Cash		4,950.00	
Credit: Memo in Sundry Accounts column	4,950.00		

The entry in the cash receipts book appears as follows (all columns not required for the entry are omitted):

Cash Receipts Book

Date	Account	Explanation	Sundry Accounts (Credit) Acct. No.	√	Sundry Accounts (Credit) Amount	Cash (Debit)
Nov. 25	First National Bank	See notes payable register		X	4,950.00	4,950.00

The postings to the general ledger from the register were:

	Debit	Credit
During the month—entries in Sundry Accounts columns:		
Sundry Interest Expense—account 8235 (two entries)	$ 70.00	
Discount on Purchases—account 8101		$ 40.00
At the end of the month:		
Vouchers Payable—account 2120	10,500.00	
Notes Payable—account 2130.....		15,480.00
Total postings to general ledger	$10,570.00	$15,520.00
Memo entry—not posted—balanced by unposted entry in cash receipts book....................	4,950.00	
	$15,520.00	$15,520.00

When a voucher is paid by a note, notations should be made in the Date Paid and Check Number columns of the voucher register, in the manner illustrated below:

Date Paid	Check No.
Nov. 1	N.P.R.

These notations indicate that the voucher was paid by a note issued on November 1, and recorded in the notes payable register. After the notations are made in the voucher register, a check mark should be entered in the √ column of the notes payable register, after the number of the voucher paid.

Entries for the payment of notes payable will be made in the cash disbursements book (or voucher register and cash disbursements book) in the usual way, with notations in the memorandum columns of the note register To facilitate posting to the controlling account, the book in which debits to Notes Payable are recorded should have a Notes Payable debit column

CHAPTER 24

Cash

What is cash? Cash may be classified in the balance sheet as follows:

Cash on hand.
Cash in bank.

Cash on hand includes coins, paper money, checks, bank drafts, cashier's checks, express money orders, and postal money orders.

Cash in bank consists of demand deposits in checking accounts. Demand certificates of deposit may be classified as cash, but time certificates should not be so classified.

Internal check. Safeguarding the cash is only one element of a good system of internal check, but it is a very important element. An adequate internal check upon cash requires a control over both receipts and disbursements. The methods of effecting this control vary greatly in different organizations, and the system described below therefore should be understood to be indicative of the objects to be attained, rather than a procedure to be invariably followed.

Cash receipts. All cash received should be deposited in the bank daily, so that the cashier will have no opportunity to "borrow" it temporarily.

Some receipts may come *over the counter* as the proceeds of cash sales or as collections on account: other receipts may come through the mail. As to the cash received *over the counter*, prenumbered invoices should be made out for all cash sales, and it should be the duty of some person to see that the duplicates of these cash sales invoices or tickets agree with the recorded receipts, and that no invoices are missing and unaccounted for. Prenumbered receipts should be issued for all collections on account: if possible, these receipts should be issued by some person other than the one who receives the cash: and a third employee should check the duplicates of the receipts against the cash record. All *over the counter* receipts should be recorded on a cash register, if possible.

The danger of misappropriations of cash is reduced if the system of internal control makes collusion necessary to conceal an abstraction of cash receipts. Therefore, the records of three persons should be required to agree, as indicated below:

(1) All remittances received through the mail should go to an employee other than the cashier or bookkeeper for listing

on an adding machine, this employee should also obtain the cash register readings so that his tape will include the total receipts for the day After he has listed the mail receipts he will turn the cash over to the cashier and will send the remittance letters to the bookkeeper

(2) The cashier will prepare the deposit tickets and will deposit the funds Since all funds received should be deposited daily, the total of the deposit tickets for the day should equal the total of the adding machine tape prepared by the first employee The cashier should either prepare each deposit ticket in duplicate, request the receiving teller at the bank to receipt the duplicate, and present the receipted duplicate to the first employee for comparison with his tape or he should present the pass book to this employee, who will then compare the entry for the deposit with the total of his tape

(3) The bookkeeper will record the cash receipts from information shown by the remittance letters, cash register tapes and other papers, the total recorded receipts for the day, as shown by the cash receipts book, should equal the first employee's tape and the cashier's deposit

With such a system of internal check, fraud cannot be practiced with the cash receipts and remain undetected even for a day, without the collusion of three persons The first employee has no access to the books and cannot falsify the records to conceal a misappropriation, he cannot expect to withhold funds received from debtors without detection, because the debtors will receive statements or letters from the credit department and will report their remittances

If the cashier withholds any cash, his daily deposits will not agree with the first employee's list or with the bookkeeper's record of cash receipts made from the remittance letters and other sources of information The bookkeeper, having no access to the cash, has no opportunity to misappropriate any of it, and therefore has no incentive to falsify his records unless he is participating in a three party collusion

Cash disbursements Since all receipts are deposited daily in the bank, all disbursements must be made by check The person authorized to sign checks should have no authority to make entries in the cash book thus a fraudulent disbursement by check could not be concealed without the collusion of two persons The collusion of a third person can be made necessary

(1) Either by requiring that all checks shall be signed by one person and countersigned by another,

(2) Or by installing the voucher system, allowing the checks to be signed by one person, but only upon authorization evidenced by a voucher signed by some other person.

All checks should be prenumbered. All spoiled, mutilated, or voided checks should be preserved. Some companies even go so far as to require that such checks be recorded in their proper sequence in the cash disbursements record, without entry in the money column, but with a notation to the effect that the check is void.

Bank columns in the cash books. If all cash receipts are deposited daily and if all disbursements are made by check, the Cash columns of the cash books will serve as a record of the deposits in, and the withdrawals from, the bank. If several bank accounts are kept, the cash receipts book should be provided with as many columns as there are bank accounts. This book may then appear somewhat as shown on page 344.

Instead of a single account with Cash, there should be a separate account with each bank, and the monthly totals of the Bank columns of the cash receipts record should be posted to the debit of the respective bank accounts.

The cash disbursements book (check register) may be similarly ruled, in which case the Bank credit columns should be provided with subcolumns to show check numbers, as shown on page 344.

Instead of a cash disbursements book with several bank columns, as in the illustration, a separate cash disbursements book may be used for each bank.

Petty, or imprest, cash. In the discussion of the system of internal check on cash disbursements, the statement was made that all disbursements should be made by check. How is this possible when certain disbursements of trifling amounts, for carfares and lunches, for instance, must be made in cash? Although such petty disbursements may not actually be made by check, their total can be represented by checks by operating a petty cash fund. The petty cash fund, which is sometimes called the imprest fund, is operated as follows:

(1) Establishment of fund:

A check is drawn for a round amount ($10.00, $50.00, or such an amount as will provide for petty disbursements for a reasonable time) and cashed. The cash is held in the office for use in making petty disbursements. The establishment of a fund of $25.00 is recorded by entries indicated on page 345.

Cash Receipts Book

Date		Account Credited	Credits: Sundry Accounts L 1	Credits: Sundry Accounts Amount	Credits: Accounts Receivable	Debits: Discount on Sales	Debits: First National Bank	Debits: First State Bank
19—								
July	1	James White			2 000 00	20 00	1 980 00	
	1	Notes Receivable		2 000 00				2 000 00
	1	F B Lathrop			1 000 00	10 00	990 00	
	1	Sales		530 00			30 00	500 00
							3 000 00	2 500 00

Cash Disbursements Book

Date		Payee	Vo No	Debit Vouchers Payable	Credits: Discount on Purchases	Credits: First National Bank Check No	Credits: First National Bank Amount	Credits: First State Bank Check No	Credits: First State Bank Amount
19—									
July	1	Rogers Brothers	327	1 000 00	20 00	39	980 00		
	1	Victory Steel Company	321	2 500 00	50 00			317	2 450 00
	1	A R Bell	317	1 200 00	12 00			318	1 188 00
	1	City Trust Company	334	1 500 00		40	1 500 00		
							2 480 00		3 638 00

Voucher register:

Debit Petty Cash, credit Vouchers Payable: $25.00.

Cash disbursements book:

Debit Vouchers Payable, credit Cash: $25.00.

These entries record a transfer from one cash account to another: that is, from the general cash account to the petty cash account.

(2) Disbursements from fund:

When expenditures are made out of the petty cash fund, receipts or other memorandums are put into the petty cash box to show what the money was spent for. In addition, memorandum entries may be made in a petty cash disbursements book, to show what accounts will be charged with the disbursements. Such a book might appear as follows:

Petty Cash Book

Date		Freight In (5172)	Freight Out (6061)	Advertising (6070)	Office Supplies (7011)	Sundry: Acct No.	Sundry: Amount
19—							
July	2	1 15					
	7	1 10	2 15				
	13			5 00		6051	2 00
	16	75			68		
	20	1 20	4 00		50		
	24	2 00	1 20	3 00			
		6 20	7 35	8 00	1 18		2 00

This is a memorandum book. No postings are made from it.

(3) Replenishment of fund:

The petty cash book is totaled and ruled because the expenditures (which total $24.73) have nearly exhausted the fund, and it is necessary to replenish it. It is replenished by a check for the exact amount of the expenditures: $24.73. The issuance of the check is recorded by the following entries:

Voucher register:

Debit the various expense (or other) accounts shown by the petty cash book, credit Vouchers Payable: $24.73.

Cash disbursements book:

Debit Vouchers Payable, credit Cash: $24.73.

The expense accounts are debited when the fund is replenished and not when the petty disbursements are made. Thus numerous small disbursements can be recorded by one entry in the voucher register.

The foregoing procedure may be summarized as follows:

	Vouchers Payable		Cash		Petty Cash		Expense (or other) Accounts	
Establishment of fund								
Entry for voucher		25 00			25 00			
Entry for check	25 00			25 00				
Disbursements from fund								
No entries other than memoranda								
Replenishment of fund								
Entry for voucher		24 73					24.73	
Entry for check	24 73			24.73				

Ignoring the debits and credits to Vouchers Payable, which offset one another, we may state the procedure as follows:

Establishment of fund	Debit Petty Cash, credit Cash
Replenishment for expenditures made	Debit expense or other accounts, credit Cash for the amount of the expenditures

It will be noted that the only entry in the Petty Cash account is the one establishing the fund; other entries will be made in this account only if the fund is increased or permanently reduced. The person in charge of the petty cash fund should always have cash or receipts in his box equal to the balance of the Petty Cash account.

The petty cash fund should always be replenished at the end of a period before the statements are prepared and the books are closed, so that the effect of expenditures from the petty cash fund will be reflected in the accounts.

Dealings with the bank. This subject will be discussed under the following captions:

- Opening a bank account
- Deposits
- Maintaining a record of the bank balance
- Miscellaneous transactions
- The bank's statement to its depositor
- Reconciling the bank account
- Adjustments after the reconciliation
- Payroll bank account
- Dividend bank account

Opening a bank account. When an account is opened at the bank, the persons authorized to draw checks against the account will be requested to sign, on cards furnished by the bank, the signatures which they will use on checks. These signature cards will be filed by the bank, so that a teller who may be unfamiliar with a depositor's signature can test the authenticity of a check drawn on his account, by comparing the depositor's signature on the card with the signature on the check.

CORPORATION

To CONTINENTAL ILLINOIS BANK AND TRUST COMPANY

You are hereby authorized to charge to our account all orders or obligations for payment of money drawn on or payable at, or which shall be paid or honored by, your Bank, bearing any of the signatures below. You are also authorized to recognize any of said signatures in the transaction of all other business for our account.

WILL SIGN ______ PRESIDENT

WILL SIGN ______ VICE-PRESIDENT

WILL SIGN ______ TREASURER

WILL SIGN ______ SECRETARY

WILL SIGN ______ ASS'T TREASURER

WILL SIGN ______ ASS'T SECRETARY

PLEASE SIGN FOOTNOTE

It is hereby certified that the above signatures are the duly authorized signatures of

______
(TITLE OF CORPORATION)

______President______Secretary
(OR OTHER OFFICER)

Date______19____

2-2-12 ORIGINAL

Signature Card

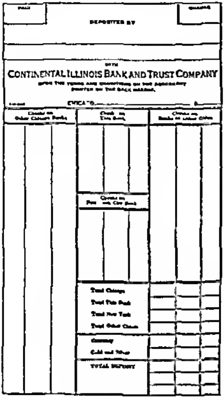
If the depositor is a corporation, the bank will request that the directors pass a resolution authorizing certain officers or employees of the corporation to sign checks, and that a copy of this resolution be filed with the bank. This resolution is the bank's authorization for honoring checks signed by the representatives of the corporation so designated.

Deposits. Deposits should be accompanied by deposit tickets which describe the items deposited. Deposit tickets are of various forms; an illustration appears on page 348.

The depositor may be furnished with a pass book in which the bank teller can record deposits: the entries in the pass book, initialed by the receiving teller, constitute receipts for the deposits.

Or the depositor may prepare deposit tickets in duplicate, and the teller will initial the carbon copy and return it to the depositor as a receipt

Maintaining a record of the bank balance Cash receipts and deposits are recorded in the cash receipts book, and disbursements are recorded in the cash disbursements book At the end of the month, totals are posted from the two books to the bank account in the ledger, and the resulting balance in this account should show the balance in the bank



Deposit Ticket

But, during the month, how can one ascertain the balance in the bank? The record may be kept

(1) On the stubs of the check book or
(2) In a bank register

A running record on the check book stub is shown on the opposite page

If many checks are drawn, the computation of the bank balance after each deposit and each check is usually regarded as unnecessary In some cases, unbound checks are used so that carbon copies can be prepared and handed to the bookkeeper for his information in recording disbursements For either of these reasons it may be expedient to eliminate the running record on the check book stubs, and keep a bank register which will not show the balance after *each* deposit and *each* check, but will show the balance at the end of each day

The following is an illustration of a bank register

Bank Register

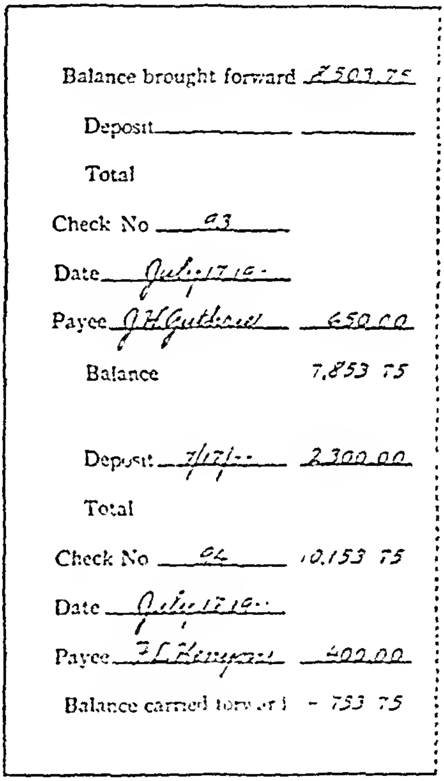
Date		First National Bank			First State Bank		
		Deposits	Withdrawals	Balance	Deposits	Withdrawals	Balance
19—							
June	30			5 000 00			4 850 00
July	1	3 000 00	2 480 00	5 520 00	2 500 00	3 638 00	3 712 00
	2	4 500 00	3 500 00	6 520 00	4 000 00	3 200 00	4 512 00

This record is kept in the following way:

Each day enter pencil totals of the day's receipts (deposits) in the Bank debit columns in the cash receipts book (see page 344) and enter these totals in the Deposits columns of the bank register.

Similarly, enter, in pencil, daily totals of the disbursements in the Bank credit columns of the cash disbursements book, or check register (see page 344), and transfer these totals to the Withdrawals columns of the bank register.

Compute the resulting daily bank balances and enter them in the Balance columns of the bank register.


Balance brought forward 8,503.75
Deposit
Total
Check No 93
Date July 17 19--
Payee J. H. Guthrie 650.00
Balance 7,853.75
Deposit 7/17/-- 2,300.00
Total
Check No 94 10,153.75
Date July 17 19--
Payee F. L. Kenyon 400.00
Balance carried forward 9,753.75

Check Book Stub

Miscellaneous transactions. In addition to providing the services of a checking account, with its benefits of a safe depository for funds and its conveniences in making remittances by check, the bank renders certain other services to its customers which will be merely mentioned here without discussion since they have been commented upon in preceding chapters. The bank will:

Through correspondent banks, collect sight drafts, notes and acceptances, or present time drafts to the drawees thereof for acceptance; this service may involve a collection fee.

Sell cashier's checks or bank drafts to its customers for their use in making remittances to creditors who prefer not to accept personal checks; this service may involve an exchange fee.

Loan funds to its customers by discounting their own notes payable or by discounting notes and acceptances receivable owned by them; this service involves an interest or a discount charge.

The bank statement. Once a month the bank will render a statement to the depositor and return the checks which it has paid and charged to his account The statement is usually a carbon copy of the bank's account with the depositor and shows the balance at the beginning of the month, the deposits, the checks paid, other debits and credits during the month, and the balance at the end of the month A simple illustration of such a statement is shown on page 351

The symbols on the statement require some explanation:

N S F —On June 27 R M Walker Company received a check for \$63 95 from Wm Barnes, this check was included in the deposit of June 27 It was returned through the clearing house to The White National Bank because Barnes did not have a sufficient balance in his bank account to cover the check The White National Bank therefore charged it back to R M Walker Company

When a returned check marked "N S F" is received from the bank an entry should be made crediting Cash and debiting the party from whom the check was received Such a check should not be regarded as cash, even if it is re deposited, until it has been paid by the maker, unless the bank gives credit for it at the time it is redeposited

Ex —On June 5 the bank charged \$ 10 exchange on a check included in the deposit of that date

Col —On June 27 the bank credited the Walker Company with the proceeds of a note collected by the bank for the company's account, and charged a collection fee of \$ 25

P S —(Payment stopped)—If the Walker Company received and deposited with The White National Bank a check from a customer who, for some reason, stopped payment on the check, the customer's bank would refuse to pay it and would return it to The White National Bank, which would charge it back to the account of the Walker Company.

S C —(Service charge)—Because of the expense involved in handling checking accounts, banks cannot profitably handle accounts with small balances, therefore, they frequently make a service charge on accounts with balances averaging less than a certain minimum amount *Instead of making* a service charge if the balance falls below a minimum amount, many banks now base the service charge on a number of factors such as the average balance of the account during the month, the number of deposits made, and the number of checks drawn

20 Vouchers Returned

June, 19--

R. M. Walker Company,
135 West State Street,
Chicago, Illinois.

In Account with THE WHITE NATIONAL BANK

N.S.F. - Not sufficient funds	Int. - Interest on daily balance
Ex. - Exchange	P.S. - Payment stopped
Col. - Collection	S.C. - Service charge

Date	Checks				Deposits	Balance
			Balance brought forward			3,500.17
1	$100.00✓				310.00✓	3,710.17
4	96.00✓					3,614.17
5	Ex. .10				175.00✓	3,789.07
6	75.00✓	150.50✓				3,563.57
8					425.50✓	3,989.07
10	39.75✓					3,949.32
11	136.50✓					3,812.82
12					136.75✓	3,949.57
13	84.20✓					3,865.37
15	164.19✓				216.80✓	3,917.98
18	7.25✓					3,910.73
19					310.80✓	4,221.53
20	39.50✓					4,182.03
22	600.35✓					3,581.68
24					165.00✓	3,746.68
26	13.75✓	19.50✓	123.80✓			3,589.63
27				Col. .25	138.20✓	3,727.58
29	76.35✓					3,651.23
30	12.60✓		N.S.F. 63.95	109.11✓		3,465.57
				Balance end of month		3,465.57

Please examine at once; if no errors are reported within ten days, the account will be considered correct.

Bank Statement

When the bank rendered this statement, it returned all paid checks to the depositor Accompanying the statement and the canceled checks, there were debit memoranda for all charges to the depositor not represented by checks, these included charges for

Exchange
Collection
Check charged back (N S F)

Reconciling the bank account The balance shown by the bank statement rarely agrees with the balance shown by the depositor's books *Items may appear on the depositor's books which have not yet been taken up on the bank's books, such as.*

Outstanding checks—not presented to and paid by the bank
Deposits not yet received by the bank—perhaps in transit in the mails
Paper left with the bank and charged to the bank as a deposit, but taken by the bank for collection only and not credited to the depositor until collected

Similarly, items may appear on the bank's books which have not yet been taken up on the depositor's books, such as

Charges for collection and exchange
Charges for checks returned N S F Although the bank notifies the depositor immediately of such returned checks, and also of checks returned because payment has been stopped, entries may not be made immediately on the depositor's books
Charges for protest fees

If a company keeps funds on deposit in several banks, contra errors are sometimes made in the bank accounts on the depositor's books Checks drawn against one bank account may be recorded as disbursements from another bank, and deposits in one bank may be charged to another bank The banks also occasionally make errors by charging or crediting one customer with another customer's checks or deposits, particularly if the customers' names are similar For all these reasons the bank statement should be reconciled with the accounts as soon as possible after it has been received

Illustration The procedure of reconciling the bank account will depend to some extent upon the system of accounting and internal check In some cases the bank statement will be checked against the record of deposits and checks shown by the check book stubs If all receipts are deposited daily, the deposits shown on the bank statement may be checked against the cash receipts book

In this illustration, we shall reconcile the June bank statement of R. M. Walker Company (page 351) with the cash books shown on pages 354 and 355.

The bank account in the ledger appears as follows:

The White National Bank

19—					19—			
May 31	Balance			3,625.97	June 30		CD23	1,964.15
June 30		3,290.37	CR16	1,628.55				
				5,254.52				

Steps in the reconciliation. The procedure of reconciling the bank account involves the following steps:

(1) Arrange in numerical order the canceled checks returned from the bank.

(2) Refer to the reconciliation at the close of the preceding month: note the items which were outstanding at that date. The May 31st reconciliation appears below:

Bank Reconciliation
May 31, 19—

Balance, per bank statement		$3,500.17
Add deposit not credited by bank		310.00√
Total		$3,810.17
Deduct outstanding checks:		
129	$100.00√	
130	84.20√	184.20
Balance per books		$3,625.97

This reconciliation shows that $310.00 recorded by the company as a deposit in May had not been credited by the bank at the end of the month, and that checks for $100.00 and $84.00 were outstanding. Reference to the bank statement on page 351 shows that the deposit was credited by the bank on June 1, and that the checks were paid on June 1 and June 13. These items are now checked on the May 31st reconciliation and on the June 30th bank statement as follows: √. The use of the special check mark is not essential, but it has the advantage of identifying the items as applicable to May.

(3) See whether the daily totals of receipts (as shown by the cash receipts book) agree with the entries in the Deposits column of the bank statement. Place check marks in the cash receipts book and in the Deposits column of the bank statement beside the items which are in agreement.

Make a list of unchecked receipts in the cash book: these represent deposits not taken up by the bank. By

Cash Receipts Book

Date	L F	Account	Explanation	Credits: Sundry Accounts	Credits: Accounts Receivable (1120)	Debits: Discount on Sales (8201)	Debits: Bank (1111)
19—							
June 5	4001	Sales	Cash sale	175 00			175 00 ✓
8	✓	John Smith	Invoice June 1		300 00	3 00	207 00
8	✓	Wm Barnes	Invoice May 5		128 50		128 50
							425 80 ✓
12	4001	Sales	Cash sale	136 75			136 75 ✓
15	✓	D L McGune	Invoice June 8		150 00	1 50	148 50
15	4001	Sales	Cash sale	68 30			68 30
							216 80 ✓
19	1130	Notes Receivable	L I Watson	250 00			250 00
19	4001	Sales	Cash sale	60 80			60 80
							310 80 ✓
21	4001	Sales	Cash sale	165 00			165 00 ✓
27	1130	Notes Receivable	John Smith	74 25			74 25
27	✓	Wm Barnes	Invoice June 1		63 95		63 95
							138 20 ✓
30	4001	Sales	Cash sale	60 50			60 50
				990 00	642 45 ✓	4 50 ✓	1 628 55 ✓

Cash Disbursements Book

Check No.	Date		Payee	Vo. No.	Vouchers Payable (2120)	Discount on Purchases (8101)	Bank (1111)
	19—						
131	June	1	C. R. Waterbury	123	75.00		75.00 ✓
132		2	O. F. Wharton	128	153.57	3.07	150.50 ✓
133		3	Bailey & Bayne	146	96.00		96.00 ✓
134		6	C. E. Whitely	147	136.50		136.50 ✓
135		9	R. E. Lathrop	130	39.75		39.75 ✓
136		13	Haines & Holmes	133	167.54	3.35	164.19 ✓
137		16	Geo. James	150	39.50		39.50 ✓
138		17	Horder & Co.	151	7.25		7.25 ✓
139		20	Davis & Co.	145	606.41	6.06	600.35 ✓
140		21	Petty Cash	151	19.50		19.50 ✓
141		21	C. N. W. Ry.	149	13.75		13.75 ✓
142		26	O. F. Wharton	140	126.33	2.53	123.80 ✓
143		28	C. R. Waterbury	155	76.35		76.35 ✓
144		29	J. B. Magee	156	12.60		12.60 ✓
145		29	G. P. Oliver	158	109.11		109.11 ✓
146		30	C. E. Whitely	142	300.00		300.00
					1,979.16 ✓	15.01 ✓	1,964.15 ✓

reference to the cash receipts book it will be noted that only one of the daily receipts is unchecked the $60 50 receipt of June 30 This is presumably a deposit in transit and must be taken into the bank reconciliation

Make a list of any unchecked items in the Deposits column of the bank statement representing credits by the bank not taken up by the depositor It will be noted that there are no unchecked items in the Deposits column of the bank statement

(4) Compare the returned checks (which have been sorted in numerical order) with the entries in the cash disbursements book Place a check mark in the cash disbursements book beside the entry for each check that has been returned by the bank

Make a list of unchecked items in the cash disbursements book these are outstanding checks By reference to page 355 it will be noted that only one entry is unchecked the $300 00 check drawn on June 30

Make a list of any charges by the bank as shown by the statement or by debit memos that do not appear in the cash disbursements book Such charges shown by the bank statement are

Exchange	$ 10
Collection	25
N S F check returned	63 95

(5) Prepare the reconciliation statement as follows

Bank Reconciliation
June 30 19—

Balance per books		$3 290 37
Deduct bank s charges not on the books		
Exchange	$ 10	
Collection	25	
N S F check—Wm Barnes	63 95	64 30
Adjusted balance		$3 226 07
Balance per bank statement		$3 465 57
Add deposit not taken up by the bank		60 50
Total		$3 526 07
Deduct outstanding checks		
146		300 00
Adjusted balance (as above)		$3 226 07

This form of bank reconciliation is preferable to the one shown on page 353 since it reconciles both the balance per books and the balance per bank statement to the correct balance

Adjustments after reconciliation. The bank reconciliation discloses the fact that the bank has made certain debits to the depositor's account which have not been taken up on the depositor's books. To take up these items, the company should debit Collection and Exchange \$.35, debit William Barnes \$63.95, and credit Cash \$64.30.

Payroll bank account. If a company pays a large number of employees by check, it is desirable to open a special payroll bank account. At each pay date a voucher is prepared for the total payroll, and a check on the regular bank account is drawn and deposited in the payroll bank account. Individual checks for the employees are then drawn on this special account, which is thus immediately exhausted. If the payroll account and the general account are kept in the same bank, different colored checks should be used.

This procedure has several advantages. In the first place, one voucher against the general bank account can be drawn for the entire payroll; the checks on the payroll account can be drawn without vouchers. In the second place, the officer authorized to sign checks on the general bank account can be relieved of the work of signing numerous payroll checks; these can be signed by some other employee. In the third place, the general bank account can be reconciled without cluttering the reconciliation statement with all the outstanding payroll checks. And, in the fourth place, the labor of recording the payroll disbursements is reduced; instead of recording all payroll checks in the cash disbursements book, check numbers may be entered in a payroll record.

The payment of the payroll is recorded as follows:

Make a voucher register entry, debiting Payroll Bank Account and crediting Vouchers Payable, for the total payroll (\$1,925.00).

Draw a check on the general bank account for the total payroll; deposit this check in the special payroll bank account.

Make a cash disbursements book entry, debiting Vouchers Payable and crediting Cash, \$1,925.00.

Make a journal entry as follows:

Salesmen's Salaries	475.00	
Office Salaries	350.00	
Officers' Salaries	1,100.00	
Payroll Bank Account		1,925.00
Distribution per payroll record.		

Instead of making and posting a journal entry, the payroll record may be drawn up in such a form that postings to the various expense accounts and the Payroll Bank Account can be made directly from it.

When the statement of the payroll bank account is returned from the bank, the canceled checks are arranged in numerical order and checked off against the check numbers on the payroll record The unchecked items will represent outstanding checks, and usually will be the only items to be taken into consideration in reconciling the payroll bank account

Dividend bank account If a company has a large number of stockholders, a special bank account may be used for the payment of dividends A voucher for the total amount of the dividend will be prepared, and a check for that amount will be drawn and deposited in this special bank account Checks payable to the individual stockholders will be drawn on this account

CHAPTER 25

Accounts Receivable. Inventories. Reserves. Alternative Methods of Accounting for Purchase Discounts and Deferred Items

Accounts Receivable

Accounts receivable and payable with same party. If goods are purchased from and sold to the same party, it is advisable to keep two accounts: one in the accounts receivable ledger, thus:

James Smith

Date		Explanation	Folio	Debit	Credit	Balance
19—						
Sept.	3	... ...	S1	500 00		500 00
	12	... ...	CR1		500 00	

and another in the accounts payable ledger, thus:

James Smith

Date		Explanation	Folio	Debit	Credit	Balance
19—						
Sept.	7	... ...	P1		375 00	375 00
	15	... ...	CD1	200 00		175 00

If a voucher system is used, the receivable from Smith will be shown in the accounts receivable ledger, and the liability will be recorded in the voucher register.

Ledger headings. The headings of the ledger sheets or cards used for accounts receivable usually are provided with spaces in which to enter certain general information relating to the debtor which may be useful for credit or sales purposes. The data will vary in different businesses, but may include the following:

Sheet No. ____________	Name ____________________
Rating ____________	Address ____________________
Credit Limit ____________	____________________
Salesman ____________	Business ____________________

The Sheet Number space is needed on active accounts extending over several pages kept in a loose-leaf binder: if the current sheet is number 7, it is known that six other sheets must be found, either in the current binder or the transfer binder, to include the entire account.

The Rating space is used to show the credit rating given the customer by rating agencies, such as Dun & Bradstreet, Inc.

The Credit Limit space shows the maximum amount fixed by the credit department.

The salesman's name may be desired on the account so that the sales manager can see whether the salesman appears to be neglecting his sales opportunity with the customer, and so that the credit and collection department can see which salesmen are making sales on accounts that become delinquent.

Account and statement at one impression. Many concerns which make a practice of sending monthly statements to their customers use bookkeeping machines to keep their accounts receivable. Such machines can be used to type the entries and compute and enter the balance after each entry The three-column ledger ruling with debit credit, and balance columns is generally used with these machines

At the beginning of the month, a statement form is inserted in the binder with each customer s ledger sheet. When an entry is to be recorded, the account and the statement are put into the machine, with a carbon between, so that the ledger account and the statement are duplicates At the end of the month, the statement is removed from the binder and mailed to the customer

Checking and lettering entries. The checking, lettering, and ruling of personal accounts are discussed in Chapter 6 Accounts with Balance columns are not ruled, because the absence of a balance in the Balance column shows that the account is closed

The following illustration shows how entries in accounts with Balance columns may be checked and lettered to indicate offsetting items

J H. Boyce

Date		Explanation	Folio		Debit		Credit	Balance
19—								
Sept.	15		S1	a	250 00			250 00
Oct	3		S2	b	500 00 ✓			750 00
	9		CR1			b	500 00 ✓	250 00
	15		S2	e	800 00 ✓			1 050 00
	20	Note Receivable	J2			c	500 00 ✓	550 00
	20		CR2			c	300 00 ✓	250 00
	22		S3	d	750 00 ✓			1,000 00
	25		S3	e	200 00 ✓			1,200 00
	31		CR3			d, e	950 00 ✓	250 00
Nov	5		S4	f	600 00 ✓			850 00
	7		S4	g	250 00			1,100 00
	9		CR4			f	200 00 ✓	900 00
	10	Note Receivable	J3			f	400 00 ✓	500 00
	11		S4	h	375 00			875 00
	16		CR5			g	100 00	775 00

The components of the \$775.00 balance of this account can be quickly ascertained. The checked items can be ignored: they represent offsetting items which do not enter into the balance. The balance consists of:

(a) September 15 debit		\$250.00
(g) November 7 debit	\$250.00	
Less credit of November 10 applicable to it.	100.00	150.00
(h) November 11 debit		375.00
Total		\$775.00

C.O.D. sales. Sales made on C.O.D. terms may be recorded in the sales book in the usual way, but a notation should be made showing that the terms are C.O.D. This can be done by merely writing C.O.D. after the name of the customer. From that point, custom varies. Three methods of procedure may be mentioned:

(1) The debtor's account is kept in its regular alphabetical position in the subsidiary accounts receivable ledger, with a notation in the heading of the account indicating that the customer is on a C.O D. basis.

(2) The accounts of all customers who are on a C.O.D. basis are grouped together in one place in the ledger, where they can be more closely watched.

(3) Instead of keeping accounts with the debtors, the bookkeeper posts the amounts of all C.O.D. sales to a C.O.D. accounts receivable register. When the collection is received, it is recorded in the cash receipts book in the usual manner. and the date of the collection is entered in the Date Collected column of the register. Such a register follows:

C.O.D. Accounts Receivable Register

Date	Invoice No.	Customer	Address	Amount	Date Collected
19—					
June 1	1387	J. B. White	Osborne, Iowa	50 00	June 5
6	1173	R. C. Luther	Dayton, Minn	75 00	
7	1189	J. Y. Ritter	Oliphant, Tenn.	60 00	

The open items in the register (that is, the entries with no notations in the Date Collected column) represent uncollected charges: in balancing the subsidiary records against the accounts receivable controlling account, the bookkeeper must include the open items in the register with the balances in the subsidiary ledger.

Reserves against receivables. The accounts receivable and the notes receivable should be valued in the balance sheet at the total

thereof, less certain reserves A reserve for bad debts should almost always he provided, and sometimes there should also be reserves for returned sales and allowances, freight, and cash discounts

Estimating the reserve for bad debts Three methods of estimating the amount to be credited to the reserve for bad debts will be described

(1) *Percentage of receivables*

Assume that a company has accounts receivable of $40,000 00 and a reserve balance (resulting from former credits) of $1,000 00 Assume, also, that the company's experience shows that about 8% of the accounts on the books at any time will prove uncollectible Then the total loss may be estimated at 8% of $40,000 00, or $3,200 00 Since the reserve already has a credit balance of $1,000 00, only $2,200 00 need be added to the reserve, this may be done by the following journal entry

Bad Debts	2 200 00	
Reserve for Bad Debts		2 200 00
To increase the reserve to the total estimated loss		

(2) *Percentage of sales*

It is somewhat difficult to obtain experience data with respect to the ratio of losses to the accounts receivable It is easier to determine the ratio of the bad debt losses of each year to the sales for the year, and therefore this ratio is more frequently used in estimating the bad debt losses This method was described in Chapter 12

(3) *Aging the receivables*

This method was mentioned in Chapter 12, but the procedure was not described in detail

The schedule of the accounts receivable ledger is drawn off on columnar paper, with columns headed to indicate various ages, such as *1 to 30 days, 31 to 60 days 61 to 90 days, 91 days to 6 months,* and *Over 6 months* The balance of each debtor's account is analyzed to determine the age of the component elements, and the aging schedule is filled out by entries such as the following (which is based on the account with J H Boyce on page 360)

Accounts Receivable Aging November 30, 19—

Name	Total	1 30 Days	31–60 Days	61–90 Days	91 Days to 6 Months	Over 6 Months
J H Boyce	775 00	525 00		250 00		

By reference to Boyce's account on page 360, it is seen that the method of lettering and checking the entries in the accounts receivable is very helpful in preparing the aging schedule.

There are four unchecked items in the account, and these are, therefore, the only ones which enter into the balance: these items are:

Date	Debit	Credit
19—		
Sept. 15	(a) $250.00	
Nov. 7...	(g) 250.00	
11...	(h) 375.00	
16....		(g) $100.00

The $775.00 balance in the account consists of the $250.00 September item (which was between 61 and 90 days old on November 30), and two November debits and one November credit in a net amount of $525.00 (which was between 1 and 30 days old on November 30).

After all the balances have been aged, the columns are totaled and the reserve is estimated on the basis of the total amounts of various ages. Supplementary information must also be considered: some accounts which are not old may be of doubtful collectibility, whereas there may be good reason to believe that accounts long past due will be collected.

Writing off bad accounts. When an account is finally regarded as uncollectible, it should be written off by an entry similar to the following:

Reserve for Bad Debts..............	75.00	
P. K. Lane..............		75.00
To write off the uncollectible account.		

Recoveries. Assume that the merchant was mistaken about Lane's account and that it was finally collected. Since the entry writing off the account against the reserve was an error, it should be reversed by the following entry:

P. K. Lane	75.00	
Reserve for Bad Debts ...		75.00
To reverse entry writing off Lane's account.		

The cash collection will then be recorded in the cash book by an entry debiting Cash and crediting Lane.

The proper treatment of partial collections on written-off accounts is somewhat more difficult to determine because it depends

upon the probability of further collections To illustrate, assume that, after Lane's account was written off, he paid $30 00

If this collection and other facts indicate that the account may be collected in full, the entries should be

In the journal Debit Lane, credit Reserve for Bad Debts $75 00
In the cash book Debit Cash, credit Lane $30 00

If no more collections are expected, the entries should be

In the journal Debit Lane, credit Reserve for Bad Debts $30 00
In the cash book Debit Cash, credit Lane $30 00

Reserves for returns and allowances, cash discounts, and freight Let us assume that a company has total accounts receivable of $20 000 00 on December 31, and has provided a reserve of $1,000 00 for bad debts This reserve may be an adequate provision for bad debt losses but it does not necessarily follow that the company will collect $19,000 00 from the accounts Customers may demand credits for returned merchandise and allowances on defective goods many of the debtors will take the cash discounts to which they are entitled and, if the goods are sold on terms which require the customers to pay the freight but allow them to deduct such payments in remitting for the merchandise, deductions will be taken for such freight

Theoretically, all these prospective deductions should be provided for by reserves, so that the accounts receivable will be stated in the balance sheet at the estimated net amount which will be collected after allowing all such deductions However, reserves for returns and allowances, cash discounts, and freight are rarely provided

Discounts on returned sales Assume that a customer buys an invoice of $1,000 00 subject to a 2% discount, and that he pays the invoice within the discount period with a check for $980 00 Subsequently he returns one tenth of the goods, which had been billed to him at $100 00 and which were paid for at the net amount of $98 00 Should he receive credit for $100 00 or $98 00?

Although this is largely a matter of policy, it would seem that the credit should be $98 00 if he is to be reimbursed in cash, and $100 00 if the credit is to be traded out The reasoning may be made clearer by assuming that the entire invoice is returned Allowing a credit of $1,000 00 to be repaid in cash would open the way to abuses of the cash discount privilege, whereas allowing a credit of only $980 00

payable in merchandise would cause the customer to lose the benefit of having paid his bill within the discount period.

Freight paid and discount taken by customer. Assume that a customer buys an invoice of merchandise amounting to $1,000.00. He is to pay the freight, which amounts to $40.00, and is allowed to deduct it in remitting for the merchandise: he is also allowed a 2% discount for cash within 10 days. Should the 2% discount be based on the $1,000.00 invoice, or on this amount less the $40.00 freight?

The discount should be based on the full amount of the invoice, because the customer is paying the freight for the seller, and is entitled to a cash discount for the funds so used. The settlement should, therefore, be made as follows:

Invoice		$1,000.00
Deduct: Freight	$40.00	
Discount—2% of $1,000.00	20.00	60.00
Net amount of remittance....		$ 940.00

Accounts receivable in the balance sheet. The amount shown under the Current Asset caption as Accounts Receivable (without any further description) should include only amounts receivable on open account from trade debtors. Accounts receivable from stockholders, officers, or employees should be shown separately in the balance sheet unless the receivables arose from sales and are collectible in accordance with the company's regular terms: accounts with such individuals for loans or other advances should be shown under the caption of Other Assets, thus:

Other Assets:
Accounts Receivable from Officers and Employees

Red balances in subsidiary ledgers. The individual accounts in the accounts receivable ledger normally have debit balances: some accounts may run into credit balances because of overpayments, credits for returns and allowances after payment of the account in full, or for other reasons. Such credit balances may be entered in the accounts in red clearly to distinguish them from the debit balances: and for this reason they are sometimes called *red* balances even though written in black ink with a notation *Cr.* after them.

Assume that the debit balance in the Accounts Receivable controlling account is $6,325.00, which represents the following balances in the subsidiary ledger:

Debit balances........	$6,500.00
Credit balances	175.00
Net debit........	$6,325.00

The controlling account balance of $6,325 00 should not be used in the balance sheet, instead, the total debit balances and the total credit balances in the subsidiary ledger should be shown, thus

Current Assets		Current Liabilities	
Accounts Receivable	$6 500 00	Credit Balances in Customers' Accounts	$175 00

Similarly, if the subsidiary accounts payable ledger contains some debit balances, the balance sheet should not show the balance of the controlling account but should show the total credit balances and the total debit balances of the subsidiary ledger, thus

Current Assets		Current Liabilities	
Debit Balances in Suppliers Accounts	$135 00	Accounts Payable	$7 800 00

Consignments A consignment is a shipment of merchandise from the owner (called the *consignor*) to another party (called the *consignee*) who becomes a selling agent of the owner

A person may be willing to accept goods on consignment although he would not be willing to purchase them

(1) Because of market fluctuations In the produce field, for instance, market prices are subject to sudden fluctuations To avoid the risk involved in quoting prices several days before receiving the goods, commission merchants take the goods on consignment and sell them at the current prices

(2) Because of the risk of tying up capital in unsalable merchandise If merchandise is purchased, it must be paid for in accordance with the credit terms but if the goods are accepted on consignment, there is no obligation to remit for them unless they are sold

The owner of the merchandise may

(1) Prefer to ship goods on consignment rather than sell them, in order to avoid credit risks goods consigned to a person who becomes insolvent can be recovered by the consignor goods sold cannot ordinarily be recovered

(2) Place goods on consignment to introduce a new product which distributors are unwilling to purchase

Since the title to consigned goods remains with the consignor, a consignment is not a sale Therefore

(1) No profit should be taken by the consignor at the time of making the shipment, nothing has happened except a change in the location of the consignor's merchandise

(2) The consignor should not have an account receivable from the consignee on his books unless the consignee has sold consigned merchandise and postponed remitting for it.

(3) When a balance sheet is prepared by the consignor, the consigned goods should be included in his inventory. In accordance with the cost principle, the cost of the merchandise on consignment can properly include the expenditures made in transporting the goods to the consignee.

Records of consignments may be kept by a consignor as follows:

When goods are shipped on consignment:

Assume that goods which cost *A* Company $400.00 are shipped to *Z* Company on consignment. *A* Company makes a memorandum journal entry, as follows:

Consignment Out—*Z* Company . .	400.00	
Consignment Sales. . .		400.00

When transportation charges are paid by the consignor:

Consignment Out—*Z* Company	15.00	
Cash		15.00

If the books are closed and a balance sheet is prepared by the consignor at this point, he will include the $400.00 cost of goods on consignment in the entry debiting Inventory and crediting Profit and Loss; the $15.00 excess of the debit balance in the Consignment Out account over the $400.00 credit balance in Consignment Sales account will be included in the inventory valuation shown in the balance sheet.

When the consignee sells the goods and remits the proceeds to the consignor:

Assume that the consignee sells the goods for $600.00, deducts a commission of $90.00, and remits the proceeds of $510.00 to the consignor.

The consignor will close out the memorandum accounts by the following entry:

Consignment Sales.	400.00	
Freight Out	15.00	
Consignment Out—*Z* Company .		415.00

And will make the following entry to record the sale:

Cash.	510.00	
Sales.		510.00

Inventories

The cost principle The cost principle requires that inventories shall not be valued at more than cost Some typical instances of the violation of this principle are given below

A man organized a company to make a hog cholera serum In a few weeks he made the statement that he had already made $1,200 00 on his investment, that being the difference between what the serum cost and the price at which he had taken orders for his entire stock which we will ship Monday " In other words he believed that he was entitled to value his inventory at the selling price instead of the cost particularly since he had unfilled orders for his entire stock He was violating the cost principle, and anticipating a profit—a profit which he never realized because, over the week end the refrigerating system went out of commission and the entire inventory spoiled

A manufacturer produced an article which went through four processes before it was completed each process required a separate department under the direction of a superintendent As an inducement to the four superintendents the manufacturer established a bonus system whereby each superintendent was to receive a percentage of what the manufacturer called ' the manufacturing profit ' This was the difference between the manufacturing cost for each process and the price which would have been paid to an outsider This manufacturing profit, which was not a profit but a saving was computed in the manner illustrated below

		First Process	Second Process	Third Process	Fourth Process
If purchased from outsiders					
Price after completion of process		$2 00	$3 00	$4 00	$5 00
Price after preceding process		—	2 00	3 00	4 00
Price for process	(a)	$2 00	$1 00	$1 00	$1 00
When manufactured					
Cost after completion of process		$1 60	$2 35	$3 03	$3 84
Cost after preceding process		—	1 60	2 35	3 03
Cost for process	(b)	$1 60	$ 75	$ 68	$ 81
Saving on each process	(a — b)	$ 40	$ 25	$ 32	$ 19

No objection can be raised to an incentive program of this kind and it could have been operated without any violation of accounting principles, if the inventories had been valued at manufacturing cost But they were valued at the theoretical purchase price, and the difference between this price and the actual cost was regarded as a profit Thus, after the first process was completed the goods in process were inventoried at $2 00 instead of at the $1 60 cost, and a

"profit" of \$.40 was recorded. A similar "profit" was taken after each process was completed. When the goods were finished, they were inventoried at the theoretical \$5.00 purchase price, instead of at the \$3.84 cost, and the \$1.16 saving had been recorded in the accounts as a profit.

A company was organized to develop a real estate subdivision. Capital stock was issued and land was purchased at a cost of \$100,000.00. It was decided to make no sales for five years, since it was believed that land values would materially increase. Each year the company made an entry debiting the Land account and crediting Surplus \$5,000.00, on the theory that it was entitled to earn interest on the funds which were tied up in its inventory of land. The cost principle was violated and a profit was anticipated.

During World War II a group of physicians organized a company to market vitamins, which were then much in demand. They found that, because of the competition, their best method of marketing the product was to ship the vitamins on a consignment basis to factories, for distribution to their employees. The company's accountant knew enough about accounting to be aware that the consignments should not be recorded as sales, but not enough to know that no profit should be taken. Therefore, he recorded the consignment shipments as follows:

Goods on Consignment....	100.00	
Finished Goods........		75.00
Profit on Consignments.. . ..		25.00

and included this "profit" in his operating statement. When the goods on consignment had accumulated to the point where the company was short of working capital and it was necessary to borrow money, the stockholders (wondering why so profitable a company would have to ask for a bank loan) had a public accountant make an investigation, and discovered the fictitious nature of their "profits."

Cost or market. The cost principle requires that inventories shall not be valued at more than cost, but it may be permissible and proper to value them at less than cost. In fact, it has long been recognized that the conservative basis for the valuation of inventories is *cost or market, whichever is lower.*

Assume that merchandise on hand cost \$1,000.00, and that the market purchase price has risen to \$1,200.00; the inventory should be valued at cost, \$1,000.00. Valuing it at \$1,200.00 would anticipate a profit by writing up an asset.

If the merchandise cost \$1,000.00 and the market purchase price has decreased to \$800.00, the inventory should be valued at \$800.00. This is done on the theory that, since what cost \$1,000.00 could now

be bought for $800 00, part of the $1,000 00 cost has been lost Or it may be stated this way Since purchase prices have declined, selling prices presumably will decline also and thus cause a reduction in profit, if the inventory is priced at cost, the profits of a future period will be reduced but since the reduction in profits was caused by a decline in market prices during the current period, it is the profits of the current period which should be reduced, the profits of the current period are reduced by valuing the inventory at the reduced market purchase price

In applying the cost or market rule, each item in the inventory should be dealt with individually, thus

	Cost	Market	Inventory Value
Commodity *A*	$500 00	$460 00	$460 00
Commodity *B*	750 00	825 00	750 00

Effect of cost or market rule on gross profits Although the cost or market rule is a conservative one, and is generally accepted, the application of the rule misstates the gross profit of a period in which the market purchase prices decline

To illustrate, assume that a company buys goods at a cost of $10,000 00 and sells one half of them for $7,500 00 The true gross profit is determined as follows

Sales	$7 500 00
Less Cost of Goods Sold (½ of $10 000 00)	5 000 00
Gross Profit on Sales	$2 500 00

But assume that the inventory valuation of the remaining half at the lower of cost or market is only $4,000 00 The profit and loss statement would usually be prepared thus

Sales		$7 500 00
Less Cost of Goods Sold		
Purchases	$10 000 00	
Less Inventory at End of Period	4 000 00	6 000 00
Gross Profit on Sales		$1 500 00

A correct statement of facts would be

Sales		$7,500 00
Less Cost of Goods Sold		
Purchases	$10 000 00	
Less Inventory—at Cost	5 000 00	5 000 00
Gross Profit on Sales		$2 500 00
Less Decline in Market Value of Inventory		1 000 00
Gross Profit Less Inventory Valuation Adjustment		$1 500 00

But to prepare a statement in the latter form illustrated, it would be necessary to value the inventory at both the cost ($5,000 00) and

the lower of cost or market ($4,000.00) in order to determine the shrinkage. Computing the valuation of the inventory on two bases would involve so much work that it is usually regarded as impracticable.

Inventory cost of items purchased at different prices. Suppose that a company made the following purchases of a certain commodity:

1,000 units at $6.00.
1,000 units at 7.00.
800 units at 8.00.

The inventory contains 1,200 units. What did they cost? Three bases of determining cost are in somewhat common use:

(1) *Specific identification.* If the goods on hand can be identified as pertaining to specific purchases, they may be inventoried at the costs shown by the invoices. Assume, for instance, that the inventory consists of 100 units of the first purchase, 500 units of the second purchase, and 600 units of the third purchase; the total cost could be computed thus:

100 units at $6.00	$ 600.00
500 units at 7.00	3,500.00
600 units at 8.00	4,800.00
	$8,900.00

(2) *First-in, first-out.* This procedure is based on the assumption that the first goods purchased are the first to be sold, and that the goods which remain are of the last purchases. The 1,200 units would be valued as follows:

800 units at $8.00 (last purchase)	$6,400.00
400 units at 7.00 (next to last purchase)	2,800.00
	$9,200.00

This procedure, called the *fifo* (initial letters of first-in, first-out) method, is the one in most common use.

(3) *Last-in, first-out.* Under this method the goods on hand are assumed to be those acquired by the earliest purchases. The 1,200 units would be valued as follows:

1,000 units at $6.00 (first purchase) . .	$6,000.00
200 units at 7.00 (from second purchase)	1,400.00
	$7,400.00

This method is called the *lifo* method. It will be observed that, on a rising market, this procedure results in a lower inventory valuation than the first-in, first-out method, and its advocates defend it on the ground of conservatism.

Procedure of inventory taking There is no universal procedure for taking an inventory Probably the simplest procedure is as follows Two people work in a team, one person counts, weighs, or otherwise measures the merchandise and calls the descriptions and quantities to the other person, who writes them on inventory sheets Prices are then entered on the sheets, extensions are made by multiplying quantities by prices, and the sheets are footed

Although this is a simple procedure, it does not provide safeguards against errors, because the work of one person is not checked by some other person There are several ways of providing such safeguards One such procedure is described below, it is a method which might be used in a retail department store

A team of two persons is assigned to a department, a section, or some other unit of space Each team is provided with prenumbered, two-part, perforated inventory tags which may be printed as illustrated at the left

Tag No 101
Department No __________
Article
Number __________
Description __________
____
Quantity (   ) __________
Taken by __________
Price __________

Tag No 101
Department No __________
Article
Number __________
Description __________
____
Quantity (   ) __________
Checked By __________

Each team is furnished with at least as many tags as the number of different classes of articles the team will inventory

Each member of the team takes a complete inventory of the stock assigned to the team One member of the team takes the tags and goes through the stock systematically, inventorying each class of merchandise, and entering the data for each class on the top section of the tag, which may then appear as shown on the following page

The "Description" space is used if the article does not have an identifying number The "Taken by" line may show the person's initials or his clock number The person who fills out the top section of the tag leaves the entire tag with the merchandise

The second member of the team follows the first member, takes an independent inventory, and fills out the bottom section of the tag, he watches for any merchandise which the first member may have overlooked and leaves the tags with the merchandise

After both members of the team have completed the inventory taking, they (or some third party) should go through the stock again to be sure that nothing has been omitted, and that the two sections of each tag are in agreement. The bottom section of each tag is then detached; the top section of the tag is left with the merchandise.

Tag No 101

Department No B19

Article

Number 97

Description

Quantity (doz.) 4

Taken by 924

Price

The bottom sections are sorted in numerical order, and are sent to the accounting office. Any unused tags are sent with them, for purposes of control; if any tags are missing, they should be found, since they may contain data applicable to inventoried goods.

After the accounting department has determined that all prenumbered tags have been accounted for, the tags are sorted by article number. This is necessary because the same kind of merchandise may be in several locations: for instance, the main department, the basement department, the display windows, the storeroom, and the receiving room. After the tags have been thus assembled, the data shown by them are entered on inventory sheets as follows:

INVENTORY

December 31, 19—

Department No. B 19 Sheet No. 1

Article No	Tag No.	Unit of Measurement	Quantity		Price	Amount
			Detail	Total		
97	101	Doz.		4		
98	102	Pr.	8			
98	304	"	16			
98	419	"	31	55		

The inventory sheet shows that No. 98 articles are in three locations, as indicated by the tag numbers. The total is entered so that the total inventory valuation of all articles of this number can be computed by one multiplication and shown in one amount

You will remember that the top half of the tag was left with the merchandise This was done for two purposes

(1) As an aid in the pricing of the inventory The inventory should be priced at the lower of cost or market, with markdowns on merchandise which is shopworn, out of style, or to be placed on sale at reduced selling prices An inspection of the merchandise will aid the buyer or department head in reaching decisions as to the pricing of the goods On the day following the taking of the inventory, he will inspect the merchandise, remove the top sections of the tags, make notations on the back of the tag if the goods are to be inventoried at a price lower than either cost or market (stating the reasons therefor) and enter the inventory prices on the tags Cost prices may be obtained from coded costs shown on the merchandise, or from purchase invoices, market prices can be obtained from current quotations markdowns will be based on judgment

(2) To provide a further check against the omission of any goods from the inventory This is accomplished by (a) giving all salespersons instructions to be on the alert, on the morning following the inventory taking, for any merchandise not accompanied by inventory tags, and (b) having the buyer or department head, while performing the operation described above, also watch for uninventoried goods

The prices shown on the tags are then entered on the inventory sheets quantities are multiplied by prices, and the amounts are entered on the sheets and totals are computed for each sheet, for each department, and for the inventory as a whole

Gross profit method of estimating inventories It is sometimes desired to estimate the value of an inventory Perhaps it is desired to prepare a balance sheet without taking a physical inventory, or perhaps it is necessary to estimate the value of an inventory which has been destroyed by fire The gross profit method is frequently used for this purpose

To illustrate this method, assume that the goods on hand June 30, 1949, were destroyed by fire, no physical inventory had been taken since December 31, 1948 The books showed the following balances at the date of the fire

Sales		$90 000 00
Returned Sales and Allowances	$ 700 00	
Inventory, December 31, 1948	20 000 00	
Purchases	65 000 00	
Returned Purchases and Allowances		1,000 00
Freight In	800 00	

The company's records show that in prior years it made a gross profit of approximately 25% of net sales. Therefore, it was assumed that the same rate of gross profit was realized during the six months preceding the fire, and the inventory at the date of the fire was estimated as follows:

Inventory, December 31, 1948		$20,000.00
Add Net Purchases:		
Purchases	$65,000.00	
Freight In	800.00	
Total	$65,800.00	
Less Returned Purchases and Allowances	1,000.00	64,800.00
Total Goods Available for Sale		$84,800.00
Less Estimated Cost of Goods Sold:		
Gross Sales	$90,000.00	
Less Returned Sales and Allowances	700.00	
Net Sales	$89,300.00	
Less Estimated Gross Profit—25% of $89,300.00	22,325.00	66,975.00
Estimated Inventory, June 30, 1949		$17,825.00

Reserves

The nature of reserves. Probably no other term used by accountants is required to do duty in so many capacities as the word *reserve*. The credit balance in a reserve may represent:

(1) A deduction from an asset.
(2) An actual liability.
(3) A contingent liability or a provision for a contingent loss.
(4) A part of the net worth.

Reserves against assets. Reserves representing decreases in asset valuations are called *valuation accounts*, and should be deducted from the balances of the related asset accounts. Reserves for bad debts and depreciation are illustrations.

If a decrease in the value of an asset is definitely determinable, the asset may be written down by a credit to the asset account. However, reserves are sometimes used to record decreases in asset values which are exactly measurable. A reserve for a decrease in the market value of securities owned is an illustration. It is desirable, for general accounting and income tax purposes, to maintain a record of the cost of the securities owned; this record would be confused if the asset account were credited with market decreases as well as with sales; to avoid this confusion, a reserve is credited with the decrease in market value.

Reserves for liabilities. Liabilities for accrued expenses are frequently shown in the balance sheet as reserves. If a liability is known to exist, but its amount is not exactly determinable, it is

proper to set up a reserve for the estimated amount If the liability is definite as to amount, it is better to set up an accrued liability account

Reserves for contingencies Reserves may be provided for contingencies which if they become realities, may create liabilities or reduce the value of assets

As an illustration of reserves for contingent liabilities, assume that a concern operating a factory does not carry workmen's compensation insurance since workmen may be injured and liabilities for damages may be incurred thereby, a reserve for the contingent liability may be established

Or assume that a company sells its product with a guarantee to correct any defects which develop within a year, the profit on the sale should be reduced by a debit to an expense account offsetting a credit to a reserve to cover the estimated future costs of repairs and service

To illustrate reserves for contingent losses in assets assume that a company because its tangible assets are distributed in relatively small amounts in a large number of locations, decides not to carry fire insurance because the premium cost would be greater than any probable loss Instead, it sets up an insurance reserve against which losses of assets resulting from fires can be charged when incurred

Reserves representing net worth. Reserves which represent a part of the net worth may be classified as follows

(1) Appropriations of surplus

These reserves are created in order to transfer out of the Earned Surplus account any earned surplus which is not available for dividends A portion of the surplus may become unavailable for dividends because of

(a) A contract

A sinking fund reserve is an illustration As discussed in Chapter 21 the terms of a bond issue may require that a restriction be placed on dividends until the bonds are paid The sinking fund reserve shows the amount of the restricted surplus

(b) The policy of the management

Although the directors of a corporation may have a legal right to pay dividends equal to the entire balance in the Earned Surplus account, they may consider it financially inexpedient to do so they may believe that the best interest of the company will be served by using part of the funds for other

purposes. Of course, the directors can limit the payment of dividends and retain the funds for other purposes without making any book entries, but they sometimes feel that it is desirable to reduce the balance in the Earned Surplus account and thus avoid the clamor for dividends which might otherwise come from the stockholders. They may, therefore, pass resolutions transferring certain amounts from Earned Surplus to such accounts as Reserve for Plant Extension, Reserve for Advertising, and Reserve for Contingencies. Such reserves represent surplus and should be shown under the Surplus caption in the balance sheet.

(2) Unrealized increases in asset valuations.

If fixed assets are written up to appraised values which are in excess of cost less depreciation, some accountants credit a Capital Surplus account with the amount of the write-up. Other accountants believe that such write-ups should not be credited to any account with a title containing the word *surplus*, and prefer using an account title such as Reserve for Increment in Valuation per Appraisal.

Alternative Methods of Accounting for Deferred Expenses and Income

Deferred expense. The method of accounting for deferred expenses described in Chapter 11 was as follows:

(1) Charge expense accounts with amounts of expenditures.
(2) At the end of the period, transfer the deferred portion of the expense to a prepaid expense account by an adjusting entry.
(3) Transfer the remaining balance of the expense account to Profit and Loss by a closing entry.
(4) At the beginning of the next period reverse the adjusting entry.

An illustration of this procedure is summarized below:

	Insurance Dr.	Insurance Cr.	Unexpired Insurance Dr.	Unexpired Insurance Cr.	Profit & Loss Dr.	Profit & Loss Cr.
(1) Jan. 1, 1948 Expenditure.......... ...	600					
(2) Dec. 31, 1948 Adjustment for deferred expense....... . .		400	400			
(3) Dec 31, 1948 Closing entry....		200			200	
	600	600				
(4) Jan. 1, 1949 Reversing entry......... . .	400			400		

An alternative method of accounting for deferred expenses is stated below

(1) Charge expenditure to a deferred expense account
(2) At the end of the period transfer the expired portion of the expense to an expense account by an adjusting entry
(3) Close the expense account to Profit and Loss

If this procedure is applied to the foregoing illustration, the journal entries are

(1) Jan. 1, 1945 Unexpired Insurance	600 00	
Cash		600 00
Cost of three-year insurance policy		
(2) Dec. 31, 1945 Insurance	200 00	
Unexpired Insurance		200 00
To charge the expense account with portion of premium applicable to current year		
(3) Dec. 31, 1945 Profit and Loss	200.00	
Insurance		200 00
To close the expense account		

The accounts resulting from the application of this alternative procedure are indicated below

	Unexpired Insurance		Insurance		Profit & Loss	
(1) Jan. 1, 1945 Expenditure	600					
(2) Dec. 31, 1945 Adjustment for expired portion		200	200			
(3) Dec. 31, 1945 Closing entry				200	200	

It will be observed that this method is somewhat simpler than the method described in Chapter 11 because it avoids the necessity of making a reversing entry. This method may be advantageously used if it is known, at the time an expenditure is made, that a portion of the expense will be deferred at the end of the period.

The procedure may be still further shortened by eliminating the expense account. The procedure then becomes as follows

(1) Charge expenditures to a deferred expense account.
(2) At the end of the period, transfer the expired portion of the expense to Profit and Loss by a closing entry

If this procedure is applied to the foregoing illustration, the journal entries are

(1) Jan. 1, 1945 Unexpired Insurance	600 00	
Cash		600 00
Cost of three-year insurance policy		

(2)	Dec. 31, 1948 Profit and Loss......................	200.00	
	Unexpired Insurance.......		200.00
	To close out to Profit and Loss the portion of the premium applicable to the current year.		

The accounts resulting from the application of this procedure are indicated below:

	Unexpired Insurance	Profit & Loss
(1) Jan. 1, 1948 Expenditure	600	
(2) Dec. 31, 1948 Closing entry	200	200

Deferred income. The method of accounting for deferred income described in Chapter 11 was as follows:

(1) Credit income accounts with the amounts of income collected.
(2) At the end of the period. transfer the amount of income not yet earned to a deferred income account, by an adjusting entry.
(3) Transfer the remaining balance of the income account to Profit and Loss by a closing entry.
(4) At the beginning of the next period reverse the adjusting entry.

The illustration of this procedure in Chapter 11 is summarized below:

	Delivery Income (Dr.)	Delivery Income (Cr.)	Deferred Delivery Income (Dr.)	Deferred Delivery Income (Cr.)	Profit & Loss (Dr.)	Profit & Loss (Cr.)
(1) Oct. 1, 1948 Amount collected ..		400				
(2) Dec. 31, 1948 Adjustment for deferred income..	100			100		
(3) Dec. 31, 1948 Closing entry ..	300					300
	400	400				
(4) Jan. 1, 1949 Reversing entry...		100	100			

An alternative method of accounting for deferred income is stated below:

(1) Credit income collections to a deferred income account.
(2) At the end of the period, transfer the earned portion of the income to an income account, by an adjusting entry.
(3) Close the income account to Profit and Loss.

The application of this procedure to the foregoing illustration involves the following journal entries:

(1)	Oct. 1, 1948 Cash .	400.00	
	Deferred Delivery Income		400.00
	Total collected.		

(2) Dec 31 1948 Deferred Delivery Income	300 00	
Delivery Income		300 00
To credit an income account with the amount of income earned during the period		
(3) Dec 31, 1948 Delivery Income	300 00	
Profit and Loss		300 00
To close the income account		

The accounts resulting from the application of this alternative procedure are indicated below

	Deferred Delivery Income (Dr)	Deferred Delivery Income (Cr)	Delivery Income (Dr)	Delivery Income (Cr)	Profit & Loss (Dr)	Profit & Loss (Cr)
(1) Oct 31 1948 Amount collected		400				
(2) Dec 31 1948 Adjustment for portion *earned*	300			300		
(3) Dec 31 1948 Closing entry			300			300

Again it will be observed that this method is somewhat simpler than the method described in Chapter 11, because it avoids the necessity of making a reversing entry This method may be advantageously used if it is known at the time an income collection is made, that a portion of the income will be deferred at the end of the period

The procedure may be still further shortened by eliminating the income account The procedure then becomes as follows

(1) Credit income collections to a deferred income account
(2) At the end of the period transfer the earned portion of the income to Profit and Loss by a closing entry

The application of this procedure to the foregoing illustration involves the following journal entries

(1) Oct 1 1948 Cash	400 00	
Deferred Delivery Income		400 00
Total collected		
(2) Dec 31 1948 Deferred Delivery Income	300 00	
Profit and Loss		300 00
To close out to Profit and Loss the portion of income earned during the current year		

The accounts resulting from the application of this procedure are indicated below

	Deferred Delivery Income (Dr)	Deferred Delivery Income (Cr)	Profit & Loss (Dr)	Profit & Loss (Cr)
(1) Oct 1 1948 Amount collected		400		
(2) Dec 31 1948 Closing entry	300			300

Alternative Method of Recording Purchase Discounts

Discounts available and lost. Under the method of recording discounts on purchases previously explained in this text, and commonly used in business, the credit balance in the Discount on Purchases account shows the amount of discount *taken*. The accounts do not show how much discount was lost by failure to pay bills within the discount period. An alternative method of recording purchases and purchase discounts may be used to disclose this information.

(1) The purchase is recorded in the voucher register by the following debits and credits:

Purchases	1,000.00	
Discounts Available		20.00
Vouchers Payable		980.00

(2) If the bill is paid within the discount period, the following entry is made in the cash disbursements book:

Vouchers Payable	980.00	
Cash		980.00

(3) If the bill is paid after the discount period has expired, the following entry is made in the cash disbursements book:

Vouchers Payable	980.00	
Discounts Lost	20.00	
Cash		1,000.00

These entries are made in the voucher register and the cash disbursements book in columns provided therefor, as follows:

Voucher Register

Voucher Number	Date	Payee	Credits: Vouchers Payable	Credits: Discounts Available	Debit Purchases
1	July 1	Darrow & Co.	980.00	20.00	1,000.00
2	July 2	Harkinson & Company	495.00	5.00	500.00

Cash Disbursements Book

Ch. No	Date	Payee	Vo No	Debits: Vouchers Payable	Debits: Discounts Lost	Credit Cash
1	July 9	Harkinson & Company	2	495.00		495.00
2	July 15	Darrow & Co..	1	980.00	20.00	1,000.00

Voucher 1 was not paid in time to take the discount: therefore, Discounts Lost was debited $20.00. Voucher 2 was paid in time to

take the discount The two discount accounts might have balances as follows

	Debit	Credit
Discounts Available		3 560 00
Discounts Lost	520 00	

The difference between these two balances (or a net credit of $3 040 00) represents discounts earned, it is shown in the profit and loss statement as the income from discount

When this method of accounting for purchase discounts is followed an adjustment is usually required at the end of the period with respect to discounts on unpaid vouchers To illustrate, assume that the following unpaid items appear in the voucher register at the end of the year

Voucher Register

Voucher Number	Date		Payee	Credits		Debit Purchases
				Vouchers Payable	Discounts Available	
348	Dec	14	John Jones	980 00	20 00	1 000 00
369		27	B F Forbes	490 00	10 00	500 00

Since these are the only unpaid items in the voucher register, the Vouchers Payable account will have a credit balance of $1,470 00 (the sum of the two items in the Vouchers Payable column) But the true liability on these two items is $1,500 00 the discounts have not yet been taken, and the liability should be shown at the full amount Therefore, an adjusting journal entry should be made crediting Vouchers Payable $30 00 to adjust the account to the full liability

What accounts should be debited? Let us assume that the discount on each of these items was deductible if payment was made within ten days from the invoice date, the discount period has expired on voucher 348, but has not expired on voucher 369 Under these conditions, the entry should be

Discounts Lost	20 00	
Discounts Available	10 00	
Vouchers Payable		30 00

The reason for debiting Discounts Lost should be clear the discount has been lost by allowing the discount period to expire without paying the bill The reason for debiting Discounts Available will perhaps be more clearly understood if we remember that the difference between the credit balance of this account and the debit balance

of the Discounts Lost account is shown in the profit and loss statement as income; but the $10.00 discount has not yet been earned, because the invoice has not been paid; hence the $10.00 should be eliminated from the accounts.

After the books have been closed, a reversing entry for the discount still available should be made, as follows:

Vouchers Payable	10.00	
Discounts Available		10.00

Changing to the alternative method of handling purchase discounts. Assume that a company has been recording purchase discounts by the method used heretofore in this text. At the end of a certain year, it is decided to change to the method described in the preceding section. An account should be set up showing the discounts available at the time of making the change. Assume that the following items are open in the voucher register:

Date	Voucher Number	Vouchers Payable
Dec. 14	981	1,000.00
27	1023	800.00
29	1024	500.00

The discount period has expired on voucher 981: 2% discounts are still available on vouchers 1023 and 1024. Therefore, the following journal entry should be made as of January 1, after the books are closed:

Vouchers Payable	26.00	
Discounts Available		26.00
Discounts available on open vouchers.		

CHAPTER 26

Fixed Assets

Definitions Fixed assets are assets of a relatively permanent nature used in the operation of the business, and not intended for sale A building used as a factory is a fixed asset, it is relatively permanent property it is used in the operation of the business and it is not intended for sale A factory building no longer in use is not a fixed asset because it is not used in operations Land held as a prospective factory site is not a fixed asset, it is permanent property and it is not intended for sale but it is not used in operations

Fixed assets may be either tangible or intangible An asset is tangible if it has bodily substance, like a building or a machine An asset is intangible if, like a patent or a copyright, its value resides not in any physical properties, but in the rights which its possession confers upon its owner

Charging fixed asset costs to operations Most fixed assets have a limited useful life The cost of such an asset (less any scrap or residual value which may be realizable at the end of the asset s usefulness) should be charged off gradually against income during the period (known or estimated) of its useful life The words most commonly used to describe such expirations of fixed asset costs are

Depreciation, which is the expiration of the cost of plant property

Depletion, which is the expiration of the cost of natural resources caused by their conversion into salable product

Amortization which is the expiration of the cost of intangible fixed assets resulting principally from the passage of time

Classification of fixed assets Fixed assets may be classified with respect to their nature and the cost expirations to which they are subject, as follows

- (A) Tangible
  - (1) Plant property
    - (a) Subject to depreciation
      Examples Buildings, machinery, tools and equipment, delivery equipment, furniture and fixtures
    - (b) Not subject to depreciation
      Example Land
  - (2) Natural resources, subject to depletion
    Examples Timber tracts, mines, oil wells

(B) Intangible:
  (1) Normally subject to amortization.
    Examples: Patents, copyrights, franchises, leasehold improvements.
  (2) Not normally subject to amortization.
    Examples: Goodwill, trademarks.

These various classes of fixed assets will be discussed in the order in which they are mentioned in the foregoing classification.

Plant Property

Cost of fixed assets. The cost principle requires that a fixed asset shall not be carried in the accounts at an amount in excess of cost, but cost may include many incidental expenditures. The cost of a fixed asset includes all expenditures made in acquiring the asset and putting it into a place and condition in which it is useful in operations. Thus, the cost of machinery includes the purchase price, the freight, and the installation costs.

Separate accounts should be kept with land and buildings, because the buildings are subject to depreciation but the land is not.

The cost of land includes the broker's commission, fees for examining and recording title, taxes accrued at the date of purchase or assessed during the period of construction of buildings on the land, the cost of grading, sewers, and pavements, and special assessments for local benefits such as street lighting.

The cost of a building constructed includes the payments to contractors, fees for permits and licenses, architects' fees, superintendents' salaries, and insurance and similar expenditures during the construction period. It is considered permissible to charge the Buildings account with interest costs incurred during the construction period on money borrowed to pay construction costs.

If land and a building are purchased, the cost should be divided between the land and the building. The Building account should be charged with any repair costs incurred to make good depreciation prior to acquisition, and with the cost of improvements.

If, after the purchase of land and a building, the building is demolished preliminary to the erection of a new building, the Land account should be charged with the entire purchase price and the demolition costs, and credited with any amounts received on the disposal of salvage from the building.

If a machine or other fixed asset is constructed by a company for its own use, it should be recorded at cost, and not at some higher price which it might have been necessary to pay if the asset had been purchased from outsiders.

Overhead in the cost of construction If fixed assets are constructed by a company for its own use, all accountants agree that their recorded cost should include the costs of materials and labor used, but there is a difference of opinion regarding charges for manufacturing expenses Three opinions are held

(1) *No manufacturing expenses should be charged* Those who hold this opinion defend it as follows The construction of fixed assets will not normally cause any appreciable increase in manufacturing expenses if part of the normal overhead is charged to fixed assets, the cost of manufactured merchandise is decreased and the profit on its sale is increased, this profit is unrealized because the credit to Profit and Loss is offset by a charge to the fixed assets This position has been approved by many accountants on the ground of conservatism other accountants, including the author believe that it violates the cost principle because all costs are not included

(2) *Fixed assets should be charged with overhead specifically incurred in their manufacture* Those who hold this opinion defend it as follows The manufacture of fixed assets can not be carried on without incurring *some* overhead costs which would not otherwise be incurred it is improper to load the costs of finished goods with expenses which were not incurred in their manufacture This seems to be a more acceptable opinion than the preceding one but it may be challenged on the ground that it, also, is not in accord with the cost principle, because all costs are not included in the valuation

(3) *Apportion overhead to fixed assets and finished goods at the same rate* Those who hold this opinion defend it as follows If plant facilities are used in the construction of fixed assets the cost of the use of these facilities is part of the cost of the fixed assets produced If a plant is used for the production of fixed assets and merchandise a failure to charge part of the manufacturing expenses to the fixed assets will result in an understatement of the cost of the fixed assets and an overstatement of the cost of the merchandise

The third opinion stated above seems to be the one which conforms to the cost principle

Depreciation Terminations of the useful lives of plant fixed assets result principally from the two causes mentioned on the following page

(1) Physical deterioration caused by wear and tear and the action of the elements.
(2) Obsolescence, the nature of which is indicated by the following illustrations:

A company owns a hand machine capable of making 100 articles a day. The business has grown so that 1,000 articles must be made each day. Instead of buying nine more hand machines, it is better to dispose of the one machine owned and buy a power machine capable of making 1,000 units a day. The hand machine is obsolete.

The operation of the power machine requires the services of five men. A new automatic machine is invented. Because of the saving in labor, it is economical to dispose of the recently acquired machine and purchase the new one. The power machine is obsolete.

The new automatic machine is capable of producing only one product. The market for this product suddenly ceases. The automatic machine is obsolete.

The word *depreciation* formerly was regarded by accountants as meaning the physical deterioration of an asset. A new concept of depreciation is developing among accountants; this new concept differs from the old one in two particulars:

(1) Depreciation, from an accounting standpoint, is now regarded as applying to the *cost or other valuation* of the asset, rather than to the asset itself. This concept is the basis of the following definition proposed by the Committee on Terminology of the American Institute of Accountants: "*Depreciation accounting* is a system of accounting which aims to distribute the cost or other basic value of tangible capital assets, less salvage (if any), over the estimated useful life of the unit. . . ."
(2) Depreciation is regarded as including the expiration of cost resulting from obsolescence as well as from physical deterioration.

Fixed assets are, of course, subject to decreases in market value, but accountants do not consider it necessary to record such decreases because fixed assets are not intended for sale. The market values may be up today and down tomorrow; such fluctuations in value may be ignored because the value of a fixed asset to a business normally lies in its usefulness rather than in its marketability.

Computing and recording depreciation There are numerous methods of estimating depreciation The *straight line method,* which is the one most frequently used will be discussed Other methods are discussed in *Principles of Accounting, Intermediate*

Theoretically the periodical depreciation charge under this method should be computed as follows

Cost of asset	\$2 500 00
Estimated residual or scrap value—amount which it is estimated can be realized from the asset when it is no longer usable	300 00
Total depreciation to be charged to expense during the total useful life of the asset	\$2 200 00
Estimated useful life	10 years
Estimated depreciation per year	\$ 220 00

As a practical matter the residual value is frequently ignored and the depreciation is based on the cost Ignoring the residual value and writing off the total cost over a period of ten years would in the foregoing illustration result in an annual charge of \$250 00 Depreciation is recorded by

Debiting a Depreciation account, which is an expense account
Crediting either

A Reserve for Depreciation which will have a credit balance to be deducted in the balance sheet from the debit balance of the fixed asset account or

The fixed asset account this is called *writing down* the asset This method usually is not desirable for two reasons

First, if depreciation is credited to the asset account, the cost of the fixed asset will be lost sight of

Second, the provision for depreciation is only an estimate by crediting it to a reserve, the amount of depreciation provided can be shown on the balance sheet, where interested parties can get information on which to base their own opinion as to the adequacy of the provision

Expenditures during ownership An expenditure is the payment, or the incurring of an obligation to make a future payment for a benefit received Expenditures incident to the ownership of fixed assets are of two classes

Capital expenditures, which should be recorded by increasing the book value of the assets In most cases this is done by debiting the asset accounts in some cases it is done by debiting the depreciation reserves

Revenue expenditures, which should be charged to expense

A careful distinction must be made between capital and revenue expenditures if a correct accounting for fixed assets and for profits is to be maintained. If a capital expenditure is charged to an expense account, the book value of the fixed asset is understated, and the net profits and net worth also are understated. On the other hand, if a revenue expenditure is charged to an asset account instead of to an expense account, the book value of the fixed asset is overstated and the net profits and net worth also are overstated.

The proper treatment of some of the more common types of expenditures is indicated below.

Particulars	Revenue Expenditures Charged to Expense Accounts	Capital Expenditures — Book Value of Assets Increased by Charges to	
		Asset Account	Reserve
Acquisition cost:			
A company purchased three secondhand machines; charge the fixed asset account		$3,000.00	
Expenditures to make good depreciation which took place prior to acquisition:			
Before the machines were put into use, they were thoroughly overhauled. This was a capital expenditure		400.00	
Installation cost:			
This is a capital expenditure.		50.00	
Betterment:			
Additional accessories were purchased for use with the machines; this expenditure is chargeable to the asset account		75.00	
Ordinary repair:			
At the end of the first month of operations, a repair bill was paid; this was a revenue expenditure or expense	$18.00		
Extraordinary repair:			
After three years of use the machines were again thoroughly reconditioned at a cost of $100.00. This was a capital expenditure because it made good some of the depreciation subsequent to acquisition: it should not be recorded by a charge to the asset account because it is not an addition to cost; it should be recorded by a charge to the depreciation reserve because it is a reduction of accrued depreciation.			$100.00

Reinstallation expense:

The first cost of installing machinery in a factory is a proper charge to the asset account. If machinery is rearranged in the factory for the purpose of improving the routing or otherwise reducing the time and cost of production, the reinstallation expense cannot properly be charged to the property account, because that account has already been debited with one installation charge. On the other hand, to charge off the expenditure as an expense of the period would scarcely be equitable, particularly if the expenditure is large. The best procedure, therefore, seems to be to carry forward the expense as a deferred charge to be written off over future periods which will be benefited by the reinstallation.

Disposal of fixed assets. When a depreciated fixed asset is disposed of, an entry should be made debiting Cash for the amount received, crediting the asset account with the cost of the asset, debiting the depreciation reserve with the depreciation provided against the asset, and debiting or crediting an account to show the loss or gain on the disposal. Three illustrations follow:

(1) *Price equal to book value*

Assume that, at the date of disposal of a machine, the asset and reserve accounts had the following balances.

	Debit	Credit
Machinery	$2,500 00	
Reserve for Depreciation—Machinery		$2,200 00

The asset had a net book value of $300 00 and was sold for $300 00 The entry to record the sale is:

Cash	300 00	
Reserve for Depreciation—Machinery	2,200 00	
Machinery		2,500 00
To record the sale of machinery, relieving the asset account of the cost and relieving the reserve of the depreciation provided thereon.		

(2) *Price less than book value*

Assume that the accounts had the following balances:

	Debit	Credit
Machinery	$2,500 00	
Reserve for Depreciation—Machinery		$1,760 00

The asset had a net book value of $740 00 and was sold for $400 00, hence there was a loss of $340.00. The entry to record the sale is:

Cash	400 00	
Earned Surplus, or Loss on Sale of Machinery	340 00	
Reserve for Depreciation—Machinery	1,760 00	
Machinery		2,500 00
To record the sale of machinery		

(3) *Price more than book value*

Assume that the accounts had the following balances:

	Debit	Credit
Machinery	$2,500 00	
Reserve for Depreciation—Machinery		$2,200 00

The asset had a net book value of $300 00 and was sold for $500 00, hence there was a profit of $200.00. The entry

to record the sale of the machinery at a profit of $200.00 is shown below:

Cash	500.00	
Reserve for Depreciation—Machinery	2,200.00	
Machinery		2,500.00
Earned Surplus, or Profit on Sale of Machinery		200.00
To record the sale of machinery		

Losses and gains on the disposal of fixed assets were formerly charged and credited to the Earned Surplus account for the following reasons:

(1) The loss or the gain is an extraneous, nonoperating item and, as such, should not be shown in the profit and loss statement, which is intended to reflect the results of regular operations.

(2) The loss or the gain is in reality a correction of the profits of prior years, which were incorrectly stated because the depreciation was incorrectly estimated. The profits of prior years are now in the Earned Surplus account: to correct them we must therefore debit or credit Earned Surplus.

Many accountants still follow this procedure, particularly if the amounts of profit or loss are large. Other accountants record the profit or loss in accounts with titles such as Loss on Sale of Machinery, show the balances of these accounts in the surplus statement, and close the accounts to Earned Surplus. Still other accountants show the balances of the loss or gain accounts in the profit and loss statement, and close these accounts to Profit and Loss.

If an asset is disposed of, a debit to Depreciation may be made for the depreciation which has accrued since the last provision was set up. To illustrate, assume that the following balances appear in the accounts on June 30, 1948:

	Debit	Credit
Machinery	$5,000.00	
Reserve for Depreciation—Machinery—created by annual credits of $300.00		$3,000.00

The asset is disposed of on June 30 for $1,500.00: no depreciation has been provided for since December 31, 1947. The following entries should be made:

Depreciation—Machinery	150.00	
Reserve for Depreciation—Machinery		150.00
To provide for depreciation as an operating expense of the six months ended June 30, 1948.		

Cash	1 500 00	
Reserve for Depreciation—Machinery	3 150 00	
Earned Surplus or Loss on Sale of Machinery	350 00	
Machinery		5 000 00
To record the sale of the machinery		

Appraisals Assume that a factory building is carried in the accounts at a cost of $75 000 00 with a depreciation reserve of $30,000 00, or at a net book value of $45,000 00 Assume, also, that an appraisal shows a theoretical valuation determined as follows

Cost to replace new	$125 000 00
Depreciation based on replacement price	35 000 00
Sound value	$ 90 000 00

The difference between the amounts shown by the books and the amounts shown by the appraisal are summarized below

	Per Books	Per Appraisal	Difference
Gross	$75 000 00	$125 000 00	$50 000 00
Depreciation	30 000 00	35 000 00	5 000 00
Net	$45 000 00	$ 90 000 00	$45 000 00

The management may desire to record the appraisal in the accounts by an entry similar to the following

Building	50 000 00	
Reserve for Depreciation		5 000 00
A surplus or reserve account		45 000 00

It was originally the custom, when appraisals were recorded, to credit a surplus account, however, accountants came to recognize the fact that crediting a surplus account introduced an unrealized profit into the accounts It then became the custom, when an appraisal was recorded, to credit an account with some title like Reserve for Unrealized Profit per Appraisal Recently the American Institute of Accountants has issued a pronouncement to the effect that the recording of an appraisal is undesirable (even though the credit is entered in a reserve) because it is a violation of the cost principle

Subsidiary records The general ledger should contain an account with each class of fixed assets, such as Land, Buildings, Machinery, Furniture and Fixtures, and Delivery Equipment It is also desirable to maintain a subsidiary plant ledger containing considerable information with respect to the cost, depreciation, repairs, and so forth, of each unit Thus, the subsidiary machinery record might contain a card or page for each machine, showing the data on the following page

Name of asset.
Identification number.
Location.
Manufacturer.
From whom purchased.
Date of installation.
Purchase cost.
Other incidental costs.
Depreciation data:
  Estimated life.
  Estimated residual value.
  Depreciation rate.
  Periodical and accumulated provision for depreciation.
Ordinary and extraordinary repairs, with information as to date, nature, and cost.
Actual life, residual value, and profit or loss on disposal.
Information as to abnormal operating conditions, such as overtime work, affecting rapidity of depreciation.

Such records furnish a good control over the fixed assets, as they are virtually a perpetual inventory showing all fixed assets which should be in the company's possession. The information regarding the cost and accumulated depreciation of each unit can be used in making entries to relieve the asset and depreciation reserve accounts of the correct amounts when a unit is fully depreciated. The subsidiary records are also useful in connection with insurance claims.

Natural Resources

Valuation. Natural resources, such as timber tracts, mines, and oil wells, are gradually converted from fixed assets into merchandise. They should be carried in the asset accounts at cost, and their book values should be reduced by provisions for depletion. Such assets are sometimes called *wasting assets.*

Development expenditures, such as those made for the removal of surface earth for strip mining operations, which do not result in the acquisition of tangible fixed assets, may be charged to the wasting asset account. Tangible fixed assets acquired for purposes of developing or extracting the wasting asset should be recorded in separate accounts; they should be depreciated in amounts proportionate to the depletion if the developments will render service throughout the entire life of the wasting asset; they should be written off over a shorter period if their usefulness will expire before the wasting asset is completely depleted.

Depletion Depletion usually is computed by dividing the cost of the wasting asset by the estimated number of units (tons, barrels, thousand feet, and so forth) in the asset; thus a unit depletion charge is computed. The total depletion charge for each period is then computed by multiplying the unit charge by the number of units converted during the period.

To illustrate, assume that $90,000.00 was paid for a mine which was estimated to contain 300,000 tons of available deposit. The unit depletion charge is $90,000.00 ÷ 300,000, or $.30. If 60,000 tons are mined during a given year, the depletion charge for the year is $.30 × 60,000, or $18,000.00.

The depletion charge will be recorded as follows:

Depletion	18,000.00	
Reserve for Depletion		18,000.00

The debit balance in the Depletion account should be included among the costs of production. The credit balance in the Reserve for Depletion should be deducted in the balance sheet from the debit balance in the asset account.

Intangible Fixed Assets Normally Subject to Amortization

Reason for amortization Some intangible fixed assets are subject to amortization because their lives are limited by law, regulation, contract, or their nature. Examples are patents, copyrights, franchises for limited periods, leaseholds, and leasehold improvements. It should be understood that the period fixed by law, regulation, or contract is the maximum period of life and that the usefulness of such assets may cease prior to the expiration of that period; in such instances the shorter useful life should be the period on which the amortization is based.

Patents If a patent is acquired by purchase, its cost is the purchase price. If it is obtained by the inventor, its cost is the total of the experimental expense, costs of working models, and expenses of obtaining the patent, including drawings, attorney's fees, and filing costs. Since a patent has no proven value until it has stood the test of an infringement suit, the cost of a successful suit may be charged to the Patents account. If the suit is unsuccessful and the patent is thereby proved to be valueless, the cost of the suit and the cost of the patent should be written off to Earned Surplus.

A patent is issued for seventeen years, and its cost should be amortized over that period unless it was acquired after the expiration of a portion of the seventeen-year period, in which case it should be written off over its remaining life. If there is a probability that the patented device or the product of the device will become obsolete

before the expiration of the patent, conservatism would suggest writing off the patent during a period shorter than its legal life.

A patent may give its owner a monopoly which enables him to develop his business to a point where, after the expiration of the patent, competitors will find it extremely difficult to enter the field and overcome the handicap. When this happens, a goodwill is created during the life of the patent. Nevertheless, the patent should be amortized and no goodwill should be set up.

Copyrights. A copyright gives its owner the exclusive right to produce and sell reading matter and works of art. The fee for obtaining a copyright is only a nominal amount, too small to justify an accounting procedure of capitalization and amortization. Costs sufficient in amount to justify such an accounting procedure may be incurred, however, when copyrights are purchased.

Copyrights are issued for twenty-eight years with a possibility of renewal for an additional twenty-eight years. However, publications rarely have an active market for a period as long as twenty-eight years, and it usually is regarded as advisable to write off copyright costs over a much shorter period.

Franchises. Franchises should not be set up in the books unless a payment was made in obtaining them. Franchises are sometimes perpetual, in which case their cost need not be amortized; usually they are granted for a definite period of time, in which case their cost should be amortized over that period.

Leaseholds and leasehold improvements. When property is rented for a period of years, an advance payment may be made which will apply against future rents; this payment may be charged to a Prepaid Rent account or a Leasehold account, and amortized over the life of the lease by charges to Rent and credits to Prepaid Rent or Leasehold.

Sometimes a company will obtain a long-term lease on real estate, and property values will so increase that the rents payable under the lease are much smaller than they would be on the basis of current values. The lease may thus become very valuable because of the saving in rent or because the lease could be sold. It is not proper, however, to place this value in the accounts, because the offsetting credit to Surplus would inflate the surplus by including an unrealized profit.

Leases for long periods frequently provide that the lessee (party who acquired the right to occupy the property) shall pay the cost of any alterations or improvements which he may desire, such as new fronts, partitions, and built-in shelving. Such alterations and improvements become a part of the real estate and revert to the owner of the real estate at the expiration of the lease; all that the lessee

obtains by the expenditure is the intangible right to benefit by the improvements during the life of the lease The lessee should therefore charge such expenditures to a Leasehold Improvements account the cost should be amortized over the life of the lease by journal entries charging Rent and crediting Leasehold Improvements The Rent account is of course also charged with the cash payments made to the lessor

Intangible Fixed Assets Not Normally Subject to Amortization

Some intangible fixed assets are not normally subject to amortization because they are assumed to have an unlimited useful life Examples are trademarks trade names secret processes and formulas and goodwill

Such assets may be carried indefinitely at cost if there is no reason to believe that their useful lives will ever terminate However, their *amortization or complete write-off may be proper* under several conditions First at the time of its acquisition there may be good reason to fear that the useful life of such an asset will terminate even though there is no conclusive evidence to that effect in such instances periodical amortization charges may be made against income Second at some date subsequent to acquisition the asset may be found to be valueless in which case it should be written off or conditions may have developed which indicate that the life of the asset will terminate in which case its cost may be amortized over the estimated remaining life or a portion of the cost may be charged to Earned Surplus (as representing amortization for prior periods), and the remainder may be amortized over the estimated remaining life

Trademarks The right to the use of a trademark may be protected by registry, the right does not terminate at the end of a definite period and trademarks are therefore normally carried indefinitely in the accounts at cost without amortization

Goodwill The following statement intended to indicate the nature of goodwill is quoted from a court decision

When an individual or a firm or a corporation has gone on for an unbroken series of years conducting a particular business and has been so scrupulous in fulfiling every obligation so careful in maintaining the standard of the goods dealt in so absolutely fair and honest in all business dealings that customers of the concern have become convinced that their experience in the future will be as satisfactory as it has been in the past while such customers good report of their own experience tends continually to bring new customers to the concern there has been produced an element of value quite as important as—in some case perhaps *far more important* than—the plant or machinery with which the business is carried on That

it is property is abundantly settled by authority, and, indeed, is not disputed. That in some cases it may be very valuable property is manifest. The individual who has created it by years of hard work and fair business dealing usually experiences no difficulty in finding men willing to pay him for it if he be willing to sell it to them."

This quotation is interesting because it indicates some of the ways in which goodwill may be created. However, it does not adequately indicate the nature of goodwill for two reasons.

In the first place, it implies that goodwill is produced only by satisfactory customer relations; but since goodwill is dependent upon profits, and since many things other than customer satisfaction contribute to profits, there are many sources of goodwill. Some of these sources are: location; manufacturing efficiency; satisfactory relations between the employees and the management, which contribute to profits through effective employee service and the reduction of losses from labor turnover; adequate sources of capital, and a credit standing which is reflected in low money costs; advertising; monopolistic privileges; and, in general, good business management.

In the second place, in placing the emphasis on customer relations, the quotation fails to put the emphasis where it really belongs: on the relation between profits and net assets. A company may be scrupulous, fair and honest, and its good repute may tend continually to attract new customers, and yet the company may have no goodwill. The existence of goodwill depends upon the earning of excess profits.

Goodwill may be defined as the value of the profits of a business which are in excess of a normal or basic return on the net assets exclusive of goodwill. To illustrate, let us assume the conditions shown below.

	Company *A*	Company *B*
Net assets, exclusive of goodwill	$100,000.00	$100,000.00
Rate of net income which, for the particular industry, may be agreed upon by the purchaser and seller of a business as normal, or which a new company entering the field may reasonably be expected to earn—say	10%	10%
Net income earned	$ 10,000.00	$ 15,000.00
Income at "normal" rate on net assets exclusive of goodwill.	10,000.00	10,000.00
Excess earnings	—	$ 5,000.00

The excess earnings of Company *B* indicate that it has a goodwill; Company *A* apparently has none.

Methods of computing goodwill. The price to be paid for goodwill in connection with the sale of a business may be an amount arbitrarily agreed upon by the purchaser and seller, without formal

computation On the other hand, it may be computed on the basis of past profits of the business Three methods of computation are illustrated below

(1) A certain number of times the average past annual earnings For instance, assume that the average earnings for five years prior to the sale of the business have been $10,000 00, and that the goodwill is to be valued at twice the average earnings the goodwill will be valued at $20,000 00 The price so computed is said to be "two years' purchase" of the average annual earnings

This method is illogical because it fails to give recognition to the fact that the goodwill is not dependent upon total profits, no matter how large but upon the relation of the profits to the assets other than goodwill, and that no goodwill exists unless the profits are in excess of a normal income on the net assets other than goodwill

Recognition is given to this fact in the two following methods of goodwill computation

(2) A certain number of times the average past earnings in excess of a return at an agreed rate on the average investment For instance, assume average annual profits for five years of $10,000 00, an average investment of $100,000 00, and an agreement to pay, for goodwill three years' purchase of the average profits in excess of 8% on the average investment The goodwill would be computed as follows

Average profits	$10 000 00
Less 8% on average investment	8 000 00
Excess	$ 2 000 00
Multiply by number of years purchase	3
Goodwill	$ 6 000 00

(3) The capitalized value of excess income

For instance, assuming the same facts as in (2) with respect to average income and investment, and assuming an agreement to compute goodwill by capitalizing, at 10%, the average annual earnings in excess of 8% on the average investment, we would compute the goodwill as follows

Average profits		$10 000 00
Less 8 % on average investment		8 000 00
Excess to be capitalized		$ 2 000 00
Capitalized value	$2 000 00 — 10 =	$20 000 00

Proper book value of goodwill A Goodwill account can properly appear on the books only if the goodwill was specifically paid for

The management of a company may believe that it has created a goodwill by advertising expenditures or otherwise, and may desire to record it on the books. To do so is regarded as improper accounting; it would be a violation of the cost principle because no specific expenditures can be identified as representing the cost of goodwill.

In the past it has been considered good accounting to carry goodwill as an asset indefinitely at its cost, without any amortization, and this is still the customary procedure. However, it is permissible to write off the Goodwill account against Earned Surplus, and a good theoretical argument can be advanced in favor of writing off the account. The price paid for goodwill is the cost of the excess earnings which have resulted from good predecessor management; it can hardly be assumed that the excess earnings will continue indefinitely unless the new management is equally efficient. In other words, the purchased goodwill may expire, although a new goodwill may be created by the new management. But since only purchased goodwill should be carried in the accounts, and since the purchased goodwill may expire, some accountants have advocated writing off purchased goodwill over the estimated period during which the profit-making factors created by the prior management will continue to be effective. This argument in favor of amortizing goodwill has not been generally accepted by the accounting profession.

Fixed Assets in the Balance Sheet

It usually is considered desirable to show the total tangible fixed assets and the total intangible fixed assets separately in the balance sheet. One procedure is illustrated below:

Tangible Fixed Assets:			
Land		$ 20,000.00	
Buildings	$150,000.00		
Less Reserve for Depreciation	30,000.00	120,000.00	
Machinery and Equipment	$ 90,000.00		
Less Reserve for Depreciation	12,000.00	78,000.00	
Tools	$ 15,000.00		
Less Reserve for Depreciation	4,000.00	11,000.00	
Delivery Equipment	$ 5,000.00		
Less Reserve for Depreciation	2,000.00	3,000.00	
Furniture and Fixtures	$ 5,500.00		
Less Reserve for Depreciation	2,200.00	3,300.00	
Total Tangible Fixed Assets			$235,300.00
Intangible Fixed Assets:			
Patents—Less Amortization		$ 6,000.00	
Goodwill		50,000.00	
Total Intangible Fixed Assets			56,000.00

If there are many fixed assets, space can be saved by a balance sheet presentation similar to the following

	Cost	Depreciation Reserve	Cost Less Depreciation	
Tangible Fixed Assets				
Land	$ 20 000 00		$ 20 000 00	
Buildings	150 000 00	$ 30 000 00	120 000 00	
Machinery and Equipment	90 000 00	12 000 00	78 000 00	
Tools	15 000 00	4 000 00	11 000 00	
Delivery Equipment	5 000 00	2 000 00	3 000 00	
Furniture and Fixtures	5 500 00	2 200 00	3 300 00	
Total Tangible Fixed Assets	$285 500 00	$ 50 200 00		$235 300 00
Intangible Fixed Assets				
Patents—Less Amortization			$ 6 000 00	
Goodwill			50 000 00	
Total Intangible Fixed Assets				56 000 00

CHAPTER 27

Departmental Operations

Departmental profits. If a merchandising concern operates two or more departments, it is advisable to keep the accounts in such a way that a statement of profit and loss can be prepared showing the results of operations by departments. Some of the departments may be operating at a good profit, whereas other departments may be making only small profits or may be incurring losses.

Determining gross profits by departments. To determine the gross profits by departments, as shown in the illustrative profit and loss statement on pages 402 and 403, the following departmental merchandise accounts were kept:

Inventory—Department *A*
Inventory—Department *B*

Sales—Department *A*
Sales—Department *B*

Returned Sales and Allowances—Department *A*
Returned Sales and Allowances—Department *B*

Purchases—Department *A*
Purchases—Department *B*

Returned Purchases and Allowances—Department *A*
Returned Purchases and Allowances—Department *B*

The trial balance in the working papers on pages 404 and 405 shows the balances of these departmental accounts. The trial balance also shows that only one Freight In account was kept. If, in a business with departments, it is possible to analyze the freight bills to determine the freight costs applicable to each department, departmental Freight In accounts may be kept. In the illustration in this chapter it is assumed that the management prefers to make an approximate apportionment of the cost of freight in, rather than to incur the expense of analyzing the freight bills. The approximate apportionment was made on the basis of purchases, as follows:

Department	Purchases	Per Cent	Freight In
A	$ 60,000.00	40%	$ 720.00
B	90,000.00	60	1,080.00
Total	$150,000.00	100%	$1,800.00

THE RANDALIA COMPANY
Statement of Profit and Loss
(Showing Net Profit or Loss on Sales by Departments)
For the Year Ended December 31, 1948

	Department *A*		Department *B*		Total	
Gross Sales		$75,000 00		$125,000 00		$200,000 00
Deduct Returned Sales and Allowances		400 00		900 00		1,300 00
Net Sales		$74,600 00		$124,100 00		$198,700 00
Deduct Cost of Goods Sold						
Purchases	$60,000 00		$ 90 000 00		$150,000 00	
Freight In	720 00		1,080 00		1,800 00	
Total	$60,720 00		$ 91,080 00		$151,800 00	
Deduct Returned Purchases and Allowances	600 00		850 00		1,450 00	
Net Cost of Purchases	$60,120 00		$ 90,230 00		$150,350 00	
Add Inventory, December 31, 1947	17,000 00		29,000 00		46,000 00	
Total	$77,120 00		$119,230 00		$190,350 00	
Deduct Inventory, December 31, 1948	13 000 00		31,000 00		44,000 00	
Cost of Goods Sold		64,120 00		88,230 00		152,350 00
Gross Profit on Sales		$10,480 00		$ 35,870 00		$ 46,350 00
Deduct Selling Expenses						
Store Rent	$ 2,400 00		$ 3 600 00		$ 6,000 00	
Advertising	1,600 00		2,400 00		4,000 00	
Salesmen's Salaries	6,000 00		7,000 00		13,000 00	
Delivery Expense	1,500 00		2,500 00		4,000 00	
Depreciation—Delivery Equipment	375 00		625 00		1,000 00	
Total Selling Expenses		11,875 00		16,125 00		28 000 00
Net Profit (Loss*) on Sales		$ 1,395 00*		$ 19,745 00		$ 18,350 00

Statement of Profit and Loss—*Continued*

	Department A		*Department B*		Total	
Deduct General Expenses:						
Office Salaries					$ 2,400.00	
Officers' Salaries					10,000.00	
Insurance					600.00	
Miscellaneous General Expense					1,200.00	
Bad Debts					420.00	
Total General Expenses						14,620.00
Net Profit on Operations						$ 3,730.00
Add Other Income:						
Discount on Purchases					$ 1,200.00	
Interest Income					80.00	
Total Other Income						1,280.00
Net Profit on Operations, and Other Income						$ 5,010.00
Deduct Other Expenses:						
Discount on Sales					$ 1,600.00	
Interest Expense					125.00	
Total Other Expenses						1,725.00
Net Income						$ 3,285.00

THE RANDALIA COMPANY
Working Papers
For the Year Ended December 31, 1948

	Trial Balance		Adjustments		Selling Account Department *A*		Selling Account Department *B*		Profit and Loss		Surplus		Balance Sheet	
Cash	8 030 00												8 030 00	
Accounts Receivable	14 800 00												14 800 00	
Reserve for Bad Debts		320 00		(d) 420 00										740 00
Notes Receivable	3 000 00												3 000 00	
Inventory—Dept *A*, Dec 31, 1947	17 000 00				17 000 00									
Inventory—Dept *B*, Dec 31, 1947	29 000 00						29 000 00							
Delivery Equipment	4 000 00												4 000 00	
Reserve for Depr —Delivery Equip		1 000 00		(e) 1 000 00										2 000 00
Accounts Payable		12 000 00												12 000 00
Notes Payable		5 000 00												5 000 00
Capital Stock		50 000 00												50 000 00
Earned Surplus, Dec 31, 1947		5 995 00										5 995 00		
Dividends	5 000 00										5 000 00			
Sales Dept *A*		75 000 00				75 000 00								
Rtd Sales and Allowances Dept *A*	400 00				400 00									
Sales Dept *B*		125 000 00						125 000 00						
Rtd Sales and Allowances Dept *B*	900 00						900 00							
Purchases Dept *A*	40 000 00				40 000 00									
Rtd Purchases and Allow Dept *A*		600 00				600 00								
Purchases Dept *B*	90 000 00						90 000 00							
Rtd Purchases and Allow Dept *B*		850 00						850 00						
Freight In	1 800 00				720 00		1 080 00							
Store Rent	6 000 00				2 400 00		3 600 00							
Advertising	4 000 00				1 600 00		2 400 00							
Salesmen's Salaries Dept *A*	6 000 00				6 000 00									
Salesmen's Salaries Dept *B*	7 000 00						7 000 00							
Delivery Expense	4 000 00				1 500 00		2 500 00							
Office Salaries	2 310 00		(b) 90 00						2 400 00					
Officers' Salaries	10 000 00								10 000 00					
Insurance	850 00			(a) 250 00					600 00					
Misc General Expense	1 200 00								1 200 00					
Discount on Purchases		1 200 00								1 200 00				
Interest Income		50 00		(c) 30 00						80 00				
Discount on Sales	1 600 00								1 600 00					
Interest Expense	125 00								125 00					
	277 015 00	277 015 00												
Totals forward			90 00	1 700 00	69 620 00	75 600 00	136 480 00	125 850 00	15 925 00	1 280 00	5 000 00	5 995 00	29 830 00	69 740 00

Working Papers For the Year Ended December 31, 1948—*Continued*

	Trial Balance		Adjustments		Selling Account Department *A*		Selling Account Department *B*		Profit and Loss		Surplus		Balance Sheet	
Totals brought forward			90 00	1,700 00	89,620 00	75,600 00	136,180 00	125,850 00	15,925 00	1,280 00	5,000 00	5,995 00	29,830 00	69,710 00
Unexpired Insurance			(a) 250 00										250 00	
Accrued Salaries				(b) 90 00										90 00
Accrued Interest Receivable			(c) 30 00										30 00	
Bad Debts			(d) 420 00						420 00					
Depreciation—Delivery Equipment			(e) 1,000 00		375 00		625 00							
			1,790 00	1,790 00										
Inventories, Dec. 31, 1948:														
Department *A*						13,000 00							13,000 00	
Department *B*								31,000 00					31,000 00	
Net Profit or Loss on Sales						1,395 00	19,715 00			18,350 00				
					89,995 00	89,995 00	156,850 00	156,850 00						
Net Income—to Earned Surplus									3,285 00			3,285 00		
									19,630 00	19,630 00				
Surplus, Dec. 31, 1948											1,280 00			1,280 00
											9,280 00	9,280 00	71,110 00	71,110 00

Selling expenses. If it is desired to have the profit and loss statement show net profits or losses on sales by departments (as in the illustration on page 402), departmental selling expense accounts should be kept to the extent practicable The trial balance in the working papers shows that, in this illustration, only the following departmental expense accounts were kept

Salesmen's Salaries—Department *A*
Salesmen's Salaries—Department *B*

In many cases it is not practicable to identify selling expenses by departments at the time they are incurred in such cases one account is kept for each type of expense and some basis of apportionment for statement purposes is adopted The balances of such accounts are frequently apportioned to departments in the ratio of sales by departments, but this is only a "rough and ready" method and is not likely to be very accurate because departmental expenses are rarely, if ever, proportionate to departmental sales

If possible, some accurate basis of apportionment should be used for each expense In the illustration, it is assumed that the store rent was apportioned by departments on the basis of floor space occupied, and that the advertising was apportioned on the basis of advertising space occupied In some businesses it may be possible to apportion delivery expenses on the basis of the number of deliveries made for each department, with proper consideration of differences in weight and bulk of the merchandise of the various departments In this illustration it is assumed that such a procedure is impracticable, and the apportionments were made on the basis of sales, as follows

Department	Sales	Per Cent	Delivery Expense	Depreciation—Delivery Equipment
A	$ 75 000 00	37 5%	$1 500 00	$ 375 00
B	125 000 00	62 5	2 500 00	625 00
Total	$200 000 00	100 0%	$4 000 00	$1 000 00

Dangers of approximations. To the extent that items of expense or income are allocated to departments by some method of approximation, the departmental profit and loss statement becomes a matter of guess work, judgments based on such a statement may be erroneous, and, unless management maintains a constant awareness of this element of guesswork and possible error, unwise policies may be adopted

Because the apportionment of general expenses and other income and expenses to departments would involve numerous approxima-

tions, the profit and loss statement on pages 402 and 403 is carried departmentally only to the point of net profit on sales.

Columnar sales and purchase records. The trial balance in the working papers on pages 404 and 405 shows the following departmental accounts:

Sales—Department *A*.
Sales—Department *B*.

Returned Sales and Allowances—Department *A*.
Returned Sales and Allowances—Department *B*.

Purchases—Department *A*.
Purchases—Department *B*.

Returned Purchases and Allowances—Department *A*.
Returned Purchases and Allowances—Department *B*.

To obtain these departmental accounts, it is advisable to use columnar books of original entry for sales, for returned sales and allowances, for purchases, and for returned purchases and allowances.

The sales book, for example, may have columns as follows:

Sales Book

Date		Name	Invoice No.	L F	Debit: Accounts Receivable (1120)	Credits: Sales Dept. *A* (4001)	Credits: Sales Dept. *B* (4002)
19—							
Jan.	7	C. H. Holmes.	1001	√	1,500 00	1,000 00	500 00
	11	D. E. Whitely . .	1002	√	2,550 00	2,000 00	550 00
	19	D. R. Long	1003	√	1,250 00	750 00	500 00
	29	G. K. Jones.	1004	√	2,525 00	525 00	2,000 00
					7,825 00	4,275 00	3,550 00
					√	√	√

The general ledger postings from this book were made as follows:

Debit: Accounts Receivable controlling account, for the total of the Accounts Receivable column.
Credits: Sales—Department *A*.
Sales—Department *B*.
For the totals of the two Sales columns.

The returned sales and allowances book should also contain three columns, headed as follows:

Credit: Accounts Receivable.
Debits: Returned Sales and Allowances—Dept. *A*.
Returned Sales and Allowances—Dept. *B*.

The purchase book should have three columns

Credit Accounts Payable
Debits Purchases—Dept *A*
Purchases—Dept *B*

The returned purchases and allowances book should contain the following columns

Debit Accounts Payable
Credits Returned Purchases and Allowances—Dept *A*
Returned Purchases and Allowances—Dept *B*

Cash sales and cash purchases Chapter 9 showed how special columns for cash sales and cash purchases may be included in the cash receipts book and the cash disbursements book If a business has only two or three departments the cash receipts book may contain a Sales column for each department and the cash disbursements book may contain a Purchases column for each department The totals of these columns can then be posted to the departmental sales and purchases accounts

But if the business is divided into a great many departments Sales and Purchases columns cannot be provided in the cash books without making these books so wide as to be inconvenient Under such conditions it is advisable to add a Cash debit column to the sales book and to have only one Sales column in the cash receipts book Cash sales will then be recorded in the two books thus

Sales Book

Date		Name	Debits			Credits	
			Accounts Receivable 1120		Cash	Sales Dept *A* 4001	Sales Dept *B* 4002
			✓	Amount			
19— Jan	16	Cash sales			600 00 (Column total not posted)	350 00	250 00

Cash Receipts Book

Date		Account Credited	Credits					Debits	
			Sundry Accounts		Sales	Accounts Receivable 1120		Discount on Sales 8201	Cash 1111
			L F	Amount		✓	Amount		
19— Jan	16	Sales			600 00 (Column total not posted)				600 00

The debit to Cash (in the sales book) and the credit to Sales (in the cash receipts book) are not posted. The posted entries are therefore:

From the cash receipts book:	The debit to Cash.
From the sales book:	The credits to the two Sales accounts.

The illustrations on page 410 show a sales book and a cash receipts book after the completion of footing and posting at the end of the month. The bookkeeper put an X at the foot of each of the two columns (Cash, in the sales book, and Sales, in the cash book) which were not to be posted. It will be noted that the totals of these two columns are equal, and the bookkeeper should always be sure that this is the case.

Cash purchases may be recorded in a similar manner. That is:

The purchase book will contain a Cash credit column, the total of which will not be posted.

The cash disbursements book will contain a Purchases debit column, the total of which will not be posted.

Entries for cash purchases will be made in both books, the debits to the departmental Purchases accounts being posted from the purchase book, and the credits to Cash being posted from the cash disbursements book.

Departmental inventories in the balance sheet. In the balance sheet of a business with departments, the inventories may be set out separately, thus:

Inventories:		
Department *A* . .	$13,000.00	
Department *B* .	31,000.00	
Total .		$44,000.00

If there are very many departments, it is impracticable to detail the inventories in the balance sheet; hence they may be shown in total.

Closing the books. The first step in closing the books of any business (whether departmentalized or not) is to make adjusting entries for deferred and accrued items and for reserves. The adjusting entries indicated by the working papers on pages 404 and 405 are as follows:

(a) Unexpired Insurance .	250.00	
Insurance.		250.00
To set up the deferred charge of unexpired insurance.		

Sales Book

Date		Name	Invoice No	Debits: Accounts Receivable 1120 ✓	Debits: Accounts Receivable 1120 Amount	Debits: Cash	Credits: Sales Dept *A* 4001	Credits: Sales Dept *B* 4002
19—								
Jan	7	C H Holmes	1001		1 500 00		1 000 00	500 00
	11	D F Whitely	1002		2,550 00		2 000 00	550 00
	16	Cash sale				600 00	350 00	250 00
	19	D R Long	1003		1,250 00		750 00	500 00
	25	Cash sale				725 00	400 00	325 00
	29	G K Jones	1004		2 525 00		525 00	2 000 00
					7 825 00	1 325 00	5 025 00	4 125 00
					✓	×	✓	✓

Invoices are often made out for cash sales as well as for sales on account, in which case the invoice numbers for cash sales should be shown in the sales book

Cash Receipts Book

Date		Account Credited	Explanation	Credits: Sundry Accounts L F	Credits: Sundry Accounts Amount	Credits: Sales	Credits: Notes Receivable 1130	Credits: Interest Income 8135	Credits: Accounts Receivable 1120 ✓	Credits: Accounts Receivable 1120 Amount	Debits: Discount on Sales 8201	Debits: Collection & Exchange 7081	Debits: Freight Out 6061	Debits: Cash 1111
19—														
Jan	1	Rtd P & A —Dept *B*		5179	125 00									125 00
	7	C D Magee	Inv Dec 28							1 000 00	10 00	15	5 00	984 85
	16	Sales				600 00								600 00
	19	Notes Receivable	O E Davis				1,000 00	10 00						1,010 00
	25	Sales				725 00								725 00
					125 00	1 325 00	1 000 00	10 00		1 000 00	10 00	15	5 00	3 441 85
						×	✓	✓		✓	✓	✓	✓	✓

(b) Office Salaries	90.00	
Accrued Salaries		90.00
Unpaid salaries at the end of the year.		
(c) Accrued Interest Receivable	30.00	
Interest Income		30.00
Accrued interest on notes receivable.		
(d) Bad Debts	420.00	
Reserve for Bad Debts		420.00
To increase the reserve to 5% of the accounts receivable.		
(e) Depreciation—Delivery Equipment	1,000.00	
Res. for Depr.—Delivery Equipment		1,000.00
To provide for depreciation at the rate of 25% per annum.		

The next step is to close the accounts used in determining the net profit on sales by departments. These accounts may all be closed to Profit and Loss; on the other hand, there is some advantage in closing them into two accounts called Selling Account—Department *A*, and Selling Account—Department *B*, because the ledger will thus show the net profit or loss on sales of each department. This latter method is illustrated in the following entries which close the books of The Randalia Company.

Sales—Dept. *A*	75,000.00	
Selling Account—Dept. *A*		75,000.00
To close the Sales account.		
Selling Account—Dept. *A*	400.00	
Returned Sales and Allowances—Dept. *A*		400.00
To close the Returned Sales and Allowances account.		
Selling Account—Dept. *A*	17,000.00	
Inventory—Dept. *A*		17,000.00
To close out the inventory at the beginning of the year.		
Selling Account—Dept. *A*	60,720.00	
Purchases—Dept. *A*		60,000.00
Freight In		720.00
To close the Purchases account, and to close out the portion of Freight In applicable to Department *A*.		
Returned Purchases and Allowances—Dept. *A*	600.00	
Selling Account—Dept. *A*		600.00
To close the Returned Purchases and Allowances account.		
Inventory—Dept. *A*	13,000.00	
Selling Account—Dept. *A*		13,000.00
To put the inventory at the end of the year on the books.		

Sales—Dept *B*	125,000 00	
Selling Account—Dept *B*		125 000 00
To close the Sales account		
Selling Account—Dept *B*	900 00	
Returned Sales and Allowances—Dept *B*		900 00
To close		
Selling Account—Dept *B*	29 000 00	
Inventory—Dept *B*		29 000 00
To close out the inventory at the beginning of the year		
Selling Account—Dept *B*	91,080 00	
Purchases—Dept *B*		90,000 00
Freight In		1 080 00
To close the Purchases account, and to close out the portion of Freight In applicable to Department *B*		
Returned Purchases and Allowances—Dept *B*	850 00	
Selling Account—Dept *B*		850 00
To close		
Inventory—Dept *B*	31,000 00	
Selling Account—Dept *B*		31,000 00
To put the inventory at the end of the year on the books		
Selling Account—Dept *A*	11,875 00	
Store Rent		2,400 00
Advertising		1,600 00
Salesmen's Salaries—Dept *A*		6,000 00
Delivery Expense		1,500 00
Depreciation—Delivery Equipment		375 00
To close the Salesmen's Salaries account of Department *A*, and to close out the portions of other selling expense accounts applicable to that department		
Selling Account—Dept *B*	16,125 00	
Store Rent		3,600 00
Advertising		2,400 00
Salesmen's Salaries—Dept *B*		7,000 00
Delivery Expense		2,500 00
Depreciation—Delivery Equipment		625 00
To close the Salesmen's Salaries account of Department *B*, and to close out the portions of other selling expense accounts applicable to that department		

Selling Account—Dept. *A* (see page 413) now has a balance showing the net loss on sales of that department, and Selling Account—Dept. *B* has a balance showing the net profit on sales of that department. The two accounts are closed by the following entry:

Selling Account—Dept *B*	19,745 00	
Selling Account—Dept *A*		1,395 00
Profit and Loss		18,350 00
To close the Selling accounts		

Selling Account—Department *A*

Date		Item	Ref.	Amount	Date		Item	Ref.	Amount
1948					1948				
Dec.	31	Rtd. S. & A.	J	400 00	Dec.	31	Sales	J	75,000 00
	31	Inv., 12/31/47	J	17,000 00		31	Rtd. P. & A.	J	600 00
	31	Purchases	J	60,000 00		31	Inv., 12/31/48	J	13,000 00
	31	Freight In	J	720 00		31	To P. & L.	J	1,395 00
	31	Store Rent	J	2,400 00					
	31	Advertising	J	1,600 00					
	31	Sales Salaries	J	6,000 00					
	31	Del. Exp.	J	1,500 00					
	31	Depr.—Del. Equip.	J	375 00					
				89,995 00					89,995 00

Selling Account—Department *B*

Date		Item	Ref.	Amount	Date		Item	Ref.	Amount
1948					1948				
Dec.	31	Rtd. S. & A.	J	900 00	Dec.	31	Sales	J	125,000 00
	31	Inv., 12/31/47	J	29,000 00		31	Rtd. P. & A.	J	850 00
	31	Purchases	J	90,000 00		31	Inv., 12/31/48	J	31,000 00
	31	Freight In	J	1,080 00					
	31	Store Rent	J	3,600 00					
	31	Advertising	J	2,400 00					
	31	Sales Salaries	J	7,000 00					
	31	Del. Exp.	J	2,500 00					
	31	Depr.—Del. Equip.	J	625 00					
	31	To P. & L.	J	19,745 00					
				156,850 00					156,850 00

The remaining closing entries are similar to those illustrated in preceding chapters.

	Debit	Credit
Profit and Loss	14,620 00	
Office Salaries		2,400 00
Officers' Salaries		10,000 00
Insurance		600 00
Miscellaneous General Expenses		1,200 00
Bad Debts		420 00
To close the general expense accounts.		
Discount on Purchases	1,200 00	
Interest Income	80 00	
Profit and Loss		1,280 00
To close the other income accounts.		
Profit and Loss	1,725 00	
Discount on Sales		1,600 00
Interest Expense		125 00
To close the other expense accounts.		
Profit and Loss	3,285 00	
Earned Surplus		3,285 00
To transfer the net income to Surplus.		
Earned Surplus	5,000 00	
Dividends		5,000 00
To close the Dividends account.		

Following is the Profit and Loss account produced by posting the foregoing closing entries

Profit and Loss

1948					1948				
Dec	31	*Net Loss on Sales—* Dept *A*	J	1,395 00	Dec	31	*Net Profit on Sales* —Dept *B*	J	19,745 00
	31	Office Salaries	J	2,400 00		31	Disc on Purchases	J	1,200 00
	31	Officers Salaries	J	10,000 00		31	Interest Income	J	80 00
	31	Insurance	J	600 00					
	31	Misc Gen Exp	J	1,200 00					
	31	Bad Debts	J	420 00					
	31	Disc on Sales	J	1,600 00					
	31	Interest Exp	J	125 00					
	31	To Earned Surplus	J	3,285 00					
				21,025 00					21,025 00

Net income by departments. An attempt is sometimes made to carry the departmental profit and loss statement to the final point of net income or net loss. Such a statement is illustrated on pages 416 and 417. It is assumed that.

(a) The bad debt losses by departments were determined by analyzing the accounts receivable to determine prospective uncollectible charges resulting from sales of Department *A* and sales of Department *B*.

(b) The office salaries, officers' salaries, and miscellaneous general expenses were apportioned to departments on the basis of sales for want of a better basis

The discount on purchases was apportioned to the two departments in the ratio of purchases on the assumption that the same discount rates were offered by the sellers of merchandise for both departments and that discount opportunities in both departments were taken advantage of to the same degree.

The discount on sales was apportioned to the two departments in the ratio of sales, on the assumption that the same discount rate was offered to customers of both departments, and that the customers of both departments took advantage of their discount opportunities to the same degree.

Interest income was apportioned on the basis of sales, on the assumption that the interest was earned on notes received from customers

Interest expense was apportioned on the basis of purchases on the assumption that funds were borrowed to finance purchases.

It is obvious that most of the foregoing assumptions are of doubtful validity and that the apportionments are subject to question. The computations are shown below:

Apportionments on Basis of Sales

	Total	Dept. *A*	Dept. *B*
Sales..	$200,000.00	$75,000.00	$125,000.00
Per cent	100.0%	37.5%	62.5%
Office Salaries	$ 2,400.00	$ 900.00	$ 1,500.00
Officers' Salaries	10,000.00	3,750.00	6,250.00
Miscellaneous General Expense	1,200.00	450.00	750.00
Interest Income	80.00	30.00	50.00
Discount on Sales	1,600.00	600.00	1,000.00

Apportionments on Basis of Purchases

	Total	Dept. *A*	Dept. *B*
Purchases	$150,000.00	$60,000.00	$ 90,000.00
Per cent	100%	40%	60%
Discount on Purchases	$ 1,200.00	$ 480.00	$ 720.00
Interest Expense	125.00	50.00	75.00

(c) The insurance was apportioned to departments in the ratio of the average inventories on the assumption that the premiums were paid for insurance on the merchandise. (Automobile insurance was charged to Delivery Expense.) The computation is shown below:

	Total	Dept. *A*	Dept. *B*
Inventories, December 31, 1947	$46,000.00	$17,000.00	$29,000.00
Inventories, December 31, 1948	44,000.00	13,000.00	31,000.00
Total	$90,000.00	$30,000.00	$60,000.00
Average Inventories	$45,000.00	$15,000.00	$30,000.00
Fractions		1/3	2/3
Insurance	$ 600.00	$ 200.00	$ 400.00

Significance of the statement. Because the apportionments of expenses are to such a large degree based on assumptions which may not be valid, complete reliance should not be placed on the amounts shown as net loss for Department *A* and net profit for Department *B*.

Moreover, even if no assumptions had been made and all expenses were definitely allocated to departments, the fact that Department *A* shows a loss should not be accepted as a conclusive reason for discontinuing it. The discontinuance of Department *A* would result in eliminating all the gross profit resulting from its operations, but it would not result in eliminating all the expenses which were charged to it. Before reaching any decision with respect to the advisability of discontinuing Department *A*, the management should make a study of the expenses and the items of miscellaneous income for the

THE RANDALIA COMPANY
Statement of Profit and Loss
(Showing Net Income by Departments)
For the Year Ended December 31, 1948

	Department A		Department B		Total	
Gross Sales		$75,000 00		$125,000 00		$200,000 00
Deduct Returned Sales and Allowances		400 00		900 00		1,300 00
Net Sales		$74,600 00		$124,100 00		$198,700 00
Deduct Cost of Goods Sold						
Purchases	$60 000 00		$ 90 000 00		$150,000 00	
Freight In	720 00		1,080 00		1,800 00	
Total	$60,720 00		$ 91,080 00		$151,800 00	
Deduct Returned Purchases and Allowances	600 00		850 00		1,450 00	
Net Cost of Purchases	$60,120 00		$ 90,230 00		$150,350 00	
Add Inventory, December 31, 1917	17,000 00		29 000 00		46 000 00	
Total	$77,120 00		$119,230 00		$196,350 00	
Deduct Inventory, December 31, 1948	13,000 00		31,000 00		44,000 00	
Cost of Goods Sold		64,120 00		88,230 00		152,350 00
Gross Profit on Sales		$10,480 00		$ 35,870 00		$ 46,350 00
Deduct Selling Expenses						
Store Rent	$ 2,400 00		$ 3,600 00		$ 6,000 00	
Advertising	1 600 00		2,400 00		4,000 00	
Salesmen's Salaries	6,000 00		7,000 00		13,000 00	
Delivery Expense	1,500 00		2,500 00		4,000 00	
Depreciation—Delivery Equipment	375 00		625 00		1,000 00	
Total Selling Expenses		11 875 00		16,125 00		28 000 00
Net Profit (Loss*) on Sales		$ 1,395 00*		$ 19,745 00		$ 18,350 00

Statement of Profit and Loss—*Continued*

	Department A		Department B		Total	
Deduct General Expenses:						
Office Salaries	$ 900.00		$ 1,500.00		$ 2,400.00	
Officers' Salaries	3,750.00		6,250.00		10,000.00	
Insurance	200.00		100.00		600.00	
Miscellaneous General Expense	150.00		750.00		1,200.00	
Bad Debts	150.00		270.00		120.00	
Total General Expenses		5,150.00		9,170.00		11,620.00
Net Profit (Loss*) on Operations		$ 6,815.00*		$ 10,575.00		$ 3,730.00
Add Other Income:						
Discount on Purchases	$ 480.00		$ 720.00		$ 1,200.00	
Interest Income	30.00	510.00	50.00	770.00	80.00	1,280.00
Net Profit (Loss*) on Operations, and Other Income		$ 6,335.00*		$ 11,315.00		$ 5,010.00
Deduct Other Expenses:						
Discount on Sales	$ 600.00		$ 1,000.00		$ 1,600.00	
Interest Expense	50.00	650.00	75.00	1,075.00	125.00	1,725.00
Net Income (Loss*)		$ 6,985.00*		$ 10,270.00		$ 3,285.00

purpose of determining the probable reductions which would result from such a discontinuance. The following statement is assumed to be the result of such a study.

Probable Reduction in Expenses and Miscellaneous Income Which Would Result from Discontinuance of Department *A*

	Charged to Department *A*	Effect of Discontinuance of Department *A*	
		Eliminated	Not Eliminated
Selling Expenses			
Store Rent	$ 2,400 00		$ 2,400 00
Advertising	1,600 00	$ 1,600 00	
Salesmen's Salaries	6,000 00	6,000 00	
Delivery Expense	1,500 00		1,500 00
Depreciation—Delivery Equipment	375 00		375 00
Total Selling Expenses	$11,875 00	$ 7,600 00	$ 4,275 00
General Expenses			
Office Salaries	$ 900 00		$ 900 00
Officers' Salaries	3,750 00		3,750 00
Insurance	200 00	$ 200 00	
Miscellaneous General Expense	450 00	150 00	300 00
Bad Debts	150 00	150 00	
Total General Expenses	$ 5,450 00	$ 500 00	$ 4,950 00
Other Income			
Discount on Purchases	$ 480 00	$ 480 00	
Interest Income	30 00	30 00	
Total Other Income	$ 510 00	$ 510 00	
Other Expenses			
Discount on Sales	$ 600 00	$ 600 00	
Interest Expense	50 00	50 00	
Total Other Expenses	$ 650 00	$ 650 00	

The first column shows the items of expense and income which appear in the Department *A* columns of the profit and loss statement on pages 416 and 417. The second column shows the items which, in the opinion of the management, would be eliminated if Department *A* were discontinued The third column shows the items which the management believes would be retained. The management's conclusions were reached as follows

The store rent charged to Department *A* would not be reduced because the entire space would have to be retained under the lease The advertising and salesmen's salary charges could be eliminated The delivery equipment and the driver would have to be retained to make deliveries for Department *B* There is only one office employee, and no portion of her salary could be eliminated. The

officers' salaries would not be reduced. Since the merchandise inventory of Department *A* would be eliminated, the insurance cost applicable to it would be eliminated. It is estimated that one third of the miscellaneous general expense apportioned to Department *B* could be eliminated. With the discontinuance of sales by Department *A*, there would be no bad debt losses in that department. Without purchases and sales in Department *A*, the sales and purchase discount would disappear, as well as the interest income on receivables arising from Department *A* sales, and the interest expense incurred to make purchases for that department.

The consequences of discontinuing Department *A* can now be estimated as follows:

Estimated Effect on Net Income Which Would Result from Discontinuance of Department *A*

Net Income of Departments *A* and *B*			$3,285.00
Net Income Which Would be Lost by Discontinuing Department *A*.			
Income Lost:			
Gross Profit on Sales		$10,480.00	
Other Income		510.00	
Total Income Lost		$10,990.00	
Expense Reductions:			
Selling Expenses	$7,600.00		
General Expenses	500.00		
Other Expenses	650.00		
Total Expense Reduction		8,750.00	
Net Income Lost			2,240.00
Resulting Net Income			$1,045.00

Surprising as it may at first seem, the foregoing statement indicates that, although the departmental profit and loss statement on pages 416 and 417 shows that Department *A*'s operations resulted in a net loss of $6,985.00, the elimination of that department would not increase the net profit of the business as a whole $6,985.00, but would reduce it from $3,285.00 to $1,045.00.

Contribution to overhead. Some accountants now prepare statements in which no attempt is made to show the net income, or even the net profit on sales, by departments. Instead, each department is credited with the income and charged with the expenses which, in the opinion of the management, would disappear if the department were discontinued. The excess of such income over the "direct" departmental expenses represents the contribution of the department to what may be called the overhead of the business as a whole, or nondepartmental overhead. Such a statement is illustrated on pages 420 and 421.

THE RANDALIA COMPANY
Statement of Profit and Loss
For the Year Ended December 31, 1948

	Department A		Department B		Total	
Gross Sales		$75 000 00		$125 000 00		$200 000 00
Deduct Returned Sales and Allowances		400 00		900 00		1 300 00
Net Sales		$74 600 00		$124 100 00		$198,700 00
Deduct Cost of Goods Sold						
Purchases	$60 000 00		$ 90 000 00		$150 000 00	
Freight In	720 00		1 080 00		1 800 00	
Total	$60 720 00		$ 91 080 00		$151 800 00	
Deduct Returned Purchases and Allowances	300 00		850 00		1,150 00	
Net Cost of Purchases	$60 420 00		$ 90 230 00		$150 650 00	
Add Inventory December 31, 1947	17 000 00		29 000 00		46 000 00	
Total	$77 420 00		$119 230 00		$196 650 00	
Deduct Inventory December 31, 1948	13 000 00		31 000 00		44 000 00	
Cost of Goods Sold		64 420 00		88 230 00		152 650 00
Gross Profit on Sales		$10 180 00		$ 35 870 00		$ 46 050 00
Add Other Income						
Discount on Purchases		480 00		720 00		1,200 00
Interest Income		30 00		50 00		80 00
Total Profit and Income		$10 690 00		$ 36 640 00		$ 47,330 00
Deduct Direct Departmental Expenses						
Advertising	$ 1 600 00		$ 2 400 00		$ 4 000 00	
Salesmen's Salaries	6 000 00		7 000 00		13,000 00	
Insurance	200 00		400 00		600 00	
Miscellaneous General Expense	150 00		250 00		400 00	
Bad Debts	150 00		270 00		420 00	
Discount on Sales	300 00		1,000 00		1,300 00	
Interest Expense	50 00		75 00		125 00	
Total		8 450 00		11 395 00		19 845 00
Contribution to Nondepartmental Overhead		$ 2 240 00		$ 25 245 00		$ 27,485 00

Statement of Profit and Loss—*Continued*

	Department *A*		Department *B*		Total	
Deduct Nondepartmental Overhead:						
Store Rent					$ 6,000.00	
Delivery Expense					4,000.00	
Depreciation—Delivery Equipment					1,000.00	
Office Salaries					2,400.00	
Officers' Salaries					10,000.00	
Miscellaneous General Expense					800.00	
Total Nondepartmental Overhead						21,200.00
Net Income						$ 3,285.00

CHAPTER 28

Theory and Principles of Accounting

Purpose of chapter. Some of the principles which govern accounting have been stated and discussed in the preceding chapters in connection with the valuation of assets and the determination of income, expenses, and net income Other principles, although not formally stated and discussed, have been implicitly recognized in the discussions of correct procedures It is the purpose of this chapter to present a brief, but comprehensive statement of generally accepted fundamental principles

"Present fairly." Audit reports rendered by certified public accountants usually contain an "opinion" expressed in language similar to the following "In our opinion, the accompanying balance sheet and related statements of profit and loss and surplus present fairly the financial condition of The *A B* Company on December 31, 19—, and the results of its operations for the year ended that date, in accordance with generally accepted accounting principles "

Audit reports formerly contained a "certificate," which usually was worded somewhat as follows "We hereby certify that, in our opinion, the accompanying balance sheet and related statements of profit and loss and surplus correctly reflect the financial condition of The *A B* Company on December 31, 19—, and the results of its operations for the year ended that date "

The change in language from "correctly reflect" to "fairly reflect" is a recognition that periodical balance sheets and operating statements can rarely be statements of absolute fact, and therefore cannot be regarded as "correct" in any absolute sense Usually they can be no more than a mixture of facts, estimates, and opinions Since accountants may honestly differ in matters of estimate and opinion, differing statements may be made and defended by different accountants However, all accountants should be governed by basic accounting principles

Accounting principles What are these basic accounting principles? Although the "opinions" in accountants' reports make reference to "generally accepted accounting principles," no authoritative compilation or code of principles exists

A principle is a fundamental truth, a fundamental law, or a

fundamental assumption which forms the basis of reasoning or conduct. But principles cannot be established in accounting, as they are in the realm of natural sciences, by experimentation. Nor have they been determined, as in the law, by authoritative pronouncement, although progress in that direction is being made. The American Institute of Accountants has issued bulletins dealing with matters which may be regarded as principles, but the opinions expressed in these bulletins are not law, nor have all of them been generally accepted by the profession. The American Accounting Association also has done commendable work in formulating statements of accounting standards, but the pronouncements of the Association, as well as those of the Institute, have not been unanimously accepted. The Securities and Exchange Commission has issued rules which touch the realm of accounting principles; these are binding only on those persons who are subject to the authority of the Commission, but they may be expected to exercise a pronounced influence on the practice of accounting generally.

Although there is no formal, comprehensive, authoritative statement of accounting principles, certain tenets are of such fundamental importance that they are generally accepted as principles. These are stated and discussed in the remainder of this chapter.

The cost basis of accounting. *Cost is the generally accepted basis for accounting for assets and expenses.* Charges to asset and expense accounts should generally be made on the basis of cost—or, in other words, on the basis of actual expenditures.

It is a violation of the cost principle to value assets in the accounts at more than cost, because this would involve an anticipation of profits. Actual costs should not be surcharged with theoretical additions by such practices as including interest on plant assets in the cost of goods manufactured, recording constructed fixed assets in the property accounts at a theoretical purchase price in excess of construction cost, valuing goods in process at various stages of completion at theoretical purchase prices, or charging operations with a theoretical rent on owned real estate in excess of the actual expenses incurred.

It is also a violation of the cost principle to value assets at less than cost *merely for purposes of conservatism*, because the profits and the net worth are thereby understated. It is, of course, necessary to give recognition to expired costs and lost costs in determining asset valuations.

The cost principle requires that assets, in general, shall be valued in the accounts at cost, or at cost minus the portions of cost which have been properly charged to operations by depreciation provisions or otherwise. The cost principle also requires that the

charges to operations for depreciation and other asset expirations shall be on the basis of cost

An expenditure need not result in the acquisition of a tangible asset to justify charging it to an asset account In general, it may be said that any expenditure for a service or other intangible which can reasonably be expected to benefit the business during at least one period beyond the period in which the expenditure is made can properly be charged to an asset account, and the asset or diminishing portions thereof may properly be regarded as continuing to exist so long as benefits are derived from the expenditure

The cost basis is sometimes criticized by people who believe that reports would be more informative if all asset values were stated at market replacement prices at the date of the report Market values of plant and other assets may be information of significance, but it does not follow that the cost basis of accounting should be abandoned in favor of an accounting procedure which would require appraisals and revaluations of all assets at each balance sheet date There are two reasons why such a procedure would not be desirable First, it would introduce unrealized profits and losses into the accounts Second, although there are many difficult problems involved in the determination of cost, there is more definite and objective evidence for the determination of costs than for the determination of market values market or replacement values are often matters of pure opinion, estimate, and conjecture It would seem that whatever benefits might be obtained by a periodical revision of the accounts to a current price basis could be obtained by stating such values parenthetically in the balance sheet

Determination of asset costs The cost of an asset includes not only the basic or purchase price but also incidental costs such as the following costs of title searches and legal fees incurred in the acquisition of real estate transportation installation and breaking in costs incident to the acquisition of machinery storage, insurance, taxes, and other costs incurred in aging certain kinds of inventories, such as wine and expenditures made in the rehabilitation of a plant purchased in a run-down condition

Problems arise in the determination of asset costs if several dissimilar assets are acquired at a lump price, or if purchase discount or interest is involved or if payment is made otherwise than in cash Some of these problems are discussed in the following paragraphs

If several kinds of assets are acquired by a cash payment at a lump price, the aggregate cost must be apportioned to the various assets This immediately introduces an element of opinion, and the effects upon current and subsequent income statements and balance sheets should be recognized Thus, if land, buildings, and

merchandise are acquired at a lump price, the apportionment of the cost affects the computation of merchandising profit during a relatively short period, the building depreciation charges during a relatively long period, and any gains or losses which may result from a disposal of the fixed assets.

Although it is customary to show cash discounts on merchandise purchases as income, this procedure is coming to be recognized as a violation of the cost principle. A cash discount of 1% for payment within 10 days is equivalent to an interest rate of about 36% per year; this rate is so high that purchase discounts cannot reasonably be regarded as income for the use of money; moreover, a profit cannot be made on a purchase. When cash discounts on merchandise purchases are treated in the operating statement as income rather than as a deduction from the merchandise cost, the procedure is a violation of the cost principle: it is sanctioned partly because of custom and partly because of the difficulty of applying discounts as a *reduction of purchase costs for purposes of inventory valuations.* (The discount would have to be applied to each item in each invoice, to obtain the net price: and net prices, if accurately stated, would run into fractions of cents—for instance, the net price of an article purchased for $4.35, subject to a 1% cash discount, would be $4.3065.) But no such practical objection can be raised against applying cash discounts as a reduction in the cost of a fixed asset, and fixed assets should therefore be charged to the accounts at their net cost.

If time intervenes between the date of purchase and the date of payment and an interest charge is incurred, the interest should be recorded as an expense and not as an addition to the cost of the asset.

If time intervenes between the date of purchase and the date of payment (or dates of installment payments) and no interest is mentioned, a part of the total payment may really be in the nature of interest. However, it usually is considered impracticable to attempt to give recognition to it: to do so would necessitate the adoption of an arbitrary interest rate, and business management is disposed, particularly in matters of minor consequence, to be more influenced by practical considerations than by accounting principles.

If assets are acquired by issuance of stocks or bonds, the price at which the securities could have been sold for cash is the true cost of the assets. For instance, if land was acquired by issuance of $50,000.00 par value of bonds which could have been sold for $55,000.00 cash, the entry to record the transaction should be:

Land	55,000.00	
Bonds Payable . .		50,000.00
Premium on Bonds .		5,000.00

If the cash value of the securities at the date of issuance cannot be determined, the price at which the asset could have been acquired for cash is an acceptable measure of cost

The determination of the cost of an asset acquired in a transaction in which some other non cash asset is part or all of the consideration may present difficulties For instance, assume that a machine is purchased at a price of $1,500 00, that $1,000 00 is paid in cash, and that the seller accepts, as the remainder of the price, an old machine which is carried at a depreciated cost of $400 00 and which could have been sold for $250 00 Did the new machine cost $1,500 00 (the nominal cost), or $1,400 00 (the sum of the cash and the undepreciated cost of the old machine), or $1,250 00 (the sum of the cash and the cash value of the old machine)? From a theoretical standpoint, $1,250 00 appears most truly to represent cost because it is the sum of cash and cash equivalent A $1,500 00 cost appears to be the least supportable because it involves the taking of a profit of $100 00, this profit," although nominally arising from the disposal of the old asset, is so related to the purchase transaction that its realization is debatable A $1,400 00 cost has some theoretical justification since it is, in a sense, cost on a going concern basis, that is, it is a valuation which includes an unexpired old plant cost plus an additional cost

Asset and expense expenditures *Expenditures chargeable to asset accounts and those chargeable to expense accounts should be carefully distinguished*

In a broad sense it may be said that most expenditures, at the moment they are made, are expenditures for assets, since they result in the acquisition of something of value Therefore, it might be theoretically correct to charge most, if not all, expenditures to asset accounts and to write off these assets as expenses of the period or periods benefited But since, at the time of making some expenditures (such as the payment of a month s rent on the first day of the month), it is known that the benefit to be derived will not extend beyond the current accounting period, it is convenient to charge such expenditures immediately to expense In general, it may be said that an expenditure may be charged to an expense account if it is not expected to benefit any accounting period beyond the one in which it is made, and that an expenditure may be charged to an asset account if it is expected to benefit at least one future period But this statement is subject to exceptions For instance, if a tire is replaced on a truck, the cost presumably would be charged to expense, because it is a minor replacement and a similar preceding cost remains in the asset account

Problems of distinguishing properly between expenditures

chargeable to asset accounts and expenditures chargeable to expense accounts arise most frequently in connection with fixed assets. Some of these problems were discussed in the chapter on fixed assets, under the caption "Capital and revenue expenditures."

Departures from the cost basis. *Although cost is the generally accepted basis for accounting for assets and expenses, other bases are sometimes preferable or acceptable.*

The gross amount of accounts receivable can scarcely be said to represent their cost, because of the profit element in the selling price of the merchandise for which the receivables were obtained. Moreover, the estimated realizable value of the receivables is the only significant basis for their valuation, and they are, therefore, properly valued at the gross amount less the reserve for losses.

Valuations of other current assets, such as inventories and temporary investments in marketable securities, at market values which are less than cost are generally recognized as desirable departures from the cost basis. Or perhaps it might be more precise to say that the reduction from cost to market is a recognition of lost costs.

Cost transformations and expirations. *Cost transformations and cost expirations must be differentiated.* During a period of operations, some costs will be transformed and others will expire: those which are transformed will remain as assets, although their nature will have changed; those which have expired should be charged to income or surplus.

Costs are transformed by the process of production. Manufacturing costs are incurred initially for materials, labor, and overhead; by the transformations of the manufacturing process, these costs become merged into goods in process and finished goods.

Costs expire as a result of utilization: for instance, the cost of postage stamps expires when the stamps are used. Although utilization is a cause of cost expiration, it should be clearly understood that utilization does not always result in an expiration of cost. For instance, the cost of gasoline used in an engine which furnishes power for a factory becomes transformed into the cost of the finished goods; the cost of gasoline consumed in the motor of a truck used to deliver sold goods is an expired cost. Similarly, the rent of a factory building for a month becomes a transformed cost at the end of the month; the rent of a sales room becomes an expired cost.

Costs are regarded as lost if they disappear without utilization: for instance, the cost of stolen merchandise is a lost cost.

Allocation of costs. *In the allocation of costs no special favors or cost exemptions should be granted.*

One application of this principle was mentioned in Chapter 26 in the discussion of the propriety of including a charge for manu-

facturing expenses in the cost of fixed assets constructed. Unless constructed fixed assets are charged with a proper portion of manufacturing expenses, a special favor or cost exemption is granted to the fixed assets.

Because of the labor and difficulties involved in the determination of material, labor and overhead costs of by-products, they are sometimes charged with only material costs, and sometimes with no costs at all. This may be a case where departure from an accounting principle must be permitted because of the difficulty of obtaining the information which would be required to comply with the principle.

Because a certain company's operations were seasonal, its plant was comparatively idle for several months during the year. To keep its plant busy during this period, the company accepted an order for a special product at a price which included the costs of material and direct labor (but no overhead) and a "profit." The management instructed its accountant to charge all the manufacturing expense for the year to the regular products and none to the special product, defending this procedure on the ground that no additional overhead was incurred because of the manufacture of the special product. Although the profits of the business as a whole presumably were increased by the manufacture and sale of the special product, a cost exemption was granted to the special product at the expense of the regular product. As a consequence, the profit on the regular product was understated and a profit on the special product was shown although a loss probably was incurred. That the total profits of a business can be increased by selling goods at a loss may at first seem anomalous, but it is obvious that over all profits may be increased by the manufacture and sale (if without interference with the other activities of a business) of a product at a price sufficient to cover material and labor and a portion of overhead which otherwise would have to be charged to other products. Management may, therefore, regard such sales as good business policy, but they should not expect accountants to misstate the costs of, and profits on, the various products.

Cost expirations and residues. *All costs expired during a period should be charged against the income for the period (or perhaps, in special instances, against earned surplus), and provision should be made for future costs applicable to current income.*

The balance sheet and income statement will not present fairly the financial condition of a business and the results of operations unless a proper differentiation is made between costs which have expired and those which remain as assets.

In determining the amounts of cost expirations and cost residues, accountants attack the problem from two directions.

(a) By making decisions as to asset expirations and accepting the remainder as asset residues.

This is the procedure normally applied to fixed asset and expense prepayment costs. The provisions for depreciation, depletion, amortization, and expense prepayment write-offs are intended to apportion costs ratably over the periods benefited: the resulting asset net valuations are considered acceptable for balance sheet purposes because they represent unexpired cost, or value in use, there being no need that the asset residue shown by the balance sheet should represent a realizable value.

(b) By making decisions as to asset residues and accepting the remainders as asset expirations.

This is the theoretically correct procedure to be applied to current assets because, with respect to such assets, emphasis should be placed upon realization rather than upon use. For this reason accountants apportion total merchandise costs between residues and expirations by placing a conservative valuation on the inventory and regarding the excess of the total merchandise cost over the inventory valuation as the asset expiration.

The determination of the amounts of expired costs and cost residues should be made with the purpose of absorbing costs over the periods benefited (in the case of fixed assets and expense prepayments) or valuing assets on a realization basis (in the case of current assets). Therefore, the amounts recorded as expirations should not be determined by any consideration of the effect upon profits, or of the amount of "profits" available for reserve provisions. Depreciation should be recognized as a cost expiration for which provision must be made regardless of whether operations for the period are profitable or unprofitable. Costs of tangible assets, intangible assets, and expense prepayments which will be of no benefit to future periods should be written off, or written down to realizable values, and should not be carried along in the accounts for subsequent write-offs; the expired or lost costs should be immediately recognized.

Companies sometimes sell their products with agreements to provide service for a period of time without cost to the purchaser; goods are sold with guarantees; a lessee may agree to return the leased property to the lessor at the end of the lease period in the condition in which it existed at the beginning of the lease; premium coupons redeemable in merchandise are issued. As a result of these and similar transactions and contracts, income may be received in

one period and costs applicable thereto may be incurred in subsequent periods Provisions for such future costs should be made by setting up reserves by charges to operations in the period in which the revenue is received

Revenue, realized revenue and income The terminology of accounting is not crystallized and precise Such terms as revenue, income and profit are used by some accountants as synonyms and by others as having different meanings

We shall consider *revenue* to be an inflow of assets but it must be recognized that there are inflows of assets which are not revenue Obviously an inflow of capital funds from stockholders is not revenue to a corporation nor should a business regard as revenue an inflow of assets which is offset by an increase in liabilities Revenue consists of an inflow of assets in the form of cash receivables, or other property from customers and clients and is related to the disposal of goods or the rendering of services

Revenues may be realized or unrealized that is to say, the inflow of assets may be earned or unearned *Realized revenues* represent earnings which may properly be credited to Profit and Loss *unrealized revenues* should be recorded by some procedure such as setting up deferred credit accounts Realized revenues are sometimes called *gross income*

Income is realized revenue resulting from sales or services

If income is earned by selling merchandise it is called *profit* The term *profit* is not properly applied to income derived from the rendering of services

When is revenue realized? *Revenues should not be regarded as earned until an asset increment has been realized, or until its realization is reasonably assured*

When is an asset increment realized? The realization of revenue customarily involves a long series of activities the purchase of materials, the fabrication of product the sale of the product and sometimes the subsequent rendering of service or the fulfilment of guarantees All these activities are conducted for the purpose of making a profit At what point in the series should the revenue be regarded as earned or realized?

The point of sale is the step in the series of activities at which the revenue *generally* is regarded as realized This point has been generally adopted because (1) it is the point at which a conversion takes place (merchandise is exchanged for cash or a receivable), and (2) it is the point at which the amount of the revenue is determinable from a sale price

But revenues are sometimes regarded as earned *before* a sale is completed, if the realization of an asset increment is reasonably

assured. For instance, if goods are manufactured under a cost-plus contract and the amounts of revenue applicable to completed portions of the contract are determinable, realization of revenue may be reasonably assured even though delivery and transfer of title have not been made. The taking up of profits on fixed-price contracts in process is of doubtful propriety, because completion costs usually cannot be estimated with accuracy; therefore, there is no certainty regarding an ultimate profit. In other words, an asset increment is not reasonably assured.

On the other hand, revenues may not be regarded as earned until some time *after* the date of sale. When merchandise is sold on account, the hazards of collection are increased if payments are to be made in installments; therefore, the taking of profits may be deferred until collections are received. For instance, if goods which cost $100.00 are sold for $150.00, payable in ten installments of $15.00, the *installment sales* basis of taking up profits may be adopted: no profit is regarded as earned at the date of sale; the entire $50.00 difference between cost and selling price is credited to a deferred profit account; since two thirds of the selling price is a return of cost and one third is prospective profit, each $15.00 installment collection is regarded as $10.00 return of cost and $5.00 profit; therefore, when each installment is collected $5.00 is regarded as realized revenue to be transferred from the deferred profit account to an earned profit account.

When should revenues from services be regarded as realized? The theoretically correct answer seems to be: in the period in which the services are rendered. However, practical considerations may lead to a postponement of the taking up of income. The rendering of the service may extend over more than one period and the amount to be charged for the entire service may not be determinable until completion; therefore, the revenue applicable to services rendered during periods prior to completion cannot be known.

Unrealized appreciation. The accounting principle that revenues should not be regarded as earned until an asset increment has been realized, or until its realization is reasonably assured, is violated if unrealized appreciation is regarded as revenue.

Let us assume that a company purchases marketable securities for $50,000.00 and that, at the end of the accounting period, these securities have a market value of $60,000.00. Has $10,000.00 of revenue been realized? No. The securities have not been sold, and the market price may decline before they are sold; therefore, no asset increment has been realized and there is no reasonable assurance that an increment will be realized.

Profits and savings. A saving, but not a profit, results from

manufacturing a thing at a cost less than the price at which it could have been purchased To regard such savings as profits is a violation of the accounting principle relative to the realization of asset increments

Companies which construct fixed assets for their own use at a cost less than the market purchase price sometimes desire to record the fixed assets at the theoretical purchase price and take up a profit The manufacture of fixed assets may increase the future profits by reducing their costs and the future depreciation charges but a present saving with a prospect of increased future profits should not be confused with a realized profit

Ultimate profits on sales of merchandise may be increased by manufacturing the goods instead of purchasing them but no profit should be regarded as realized until the goods are sold

Conservatism *Conservatism, although desirable, is not a justification for the understatement of net worth and the misstatement of net income*

Accountants believe that the balance sheet should present a conservative picture of the financial condition of a business that the profit and loss statement should present a conservative picture of the earnings and that, when matters of opinion or estimate are involved it is commendable in instances of doubt, to understate the net worth and the net income rather than to overstate them

The emphasis on conservatism doubtless arose from the fact that, in the early days of the development of public accounting practice, the owners of a business were active in its management and were informed about its affairs therefore the services of public accountants were principally required for the preparation of reports for bankers and other grantors of short term credit Grantors of credit were primarily interested in the margin of security for their loans they were naturally disposed to regard balance sheet conservatism as a safeguard and hence a basic virtue and it was natural that public accountants should be influenced by their attitude

Conservatism is still regarded as a virtue, it may even be regarded as justifying a departure from procedures which could be defended from the standpoint of good accounting theory For instance, in the preceding discussion of principles applicable to the recording of costs, it was pointed out that any expenditure for a service which can reasonably be expected to benefit the business during more than one period can properly be charged to an asset account, and the asset, or diminishing portions thereof may properly be regarded as continuing to exist so long as benefits are to be derived from the expenditure This is sound accounting theory But suppose that large expenditures are made for an advertising cam

paign, the benefits of which may be expected to extend beyond the period in which the expenditures are made. It might be theoretically correct to carry forward part of the cost as a deferred charge; but, because of the practical difficulty of determining the portion of the cost which could properly be deferred, most accountants probably would feel that they would be justified, on the ground of conservatism, in deferring no portion of the cost.

Although conservatism is still regarded as commendable, there is a growing tendency to question the time-honored beliefs that balance sheet conservatism outweighs all other considerations, that a conservative balance sheet is a good balance sheet for all purposes, and that balance sheet conservatism automatically produces a proper statement of operations. These beliefs are now being subjected to critical reconsideration for three reasons:

First, it is recognized that, with the increase in the number of stockholders who are not active in the management, accounting reports must serve the requirements of investors as well as short-term creditors, and that ultraconservatism may be prejudicial to the interests of stockholders or the holders of other securities who, having been led to believe that the company in which they have made investments is less prosperous than it really is, may sell their securities for less than they are really worth.

Second, a plea of conservatism will not justify an understatement of income that results in an avoidance or evasion of income taxes.

Third, accountants are becoming increasingly aware that adherence to the doctrine of balance sheet conservatism may result in income statements which are:

(a) Incorrect.

It may be conservative from the balance sheet standpoint to charge operations with fixed asset expenditures which would more properly be capitalized, or provide excessive reserves for depreciation and bad debts, but the net income is misstated.

(b) And sometimes unconservative.

For instance, some accountants have advocated writing off bond discount, by charge to Earned Surplus, during the period in which the bonds were issued, in order to clear the balance sheet of a deferred charge which has no realizable value. But the effect is to relieve the income statements of all periods throughout the life of the bonds of charges for an element of interest cost; as a result, the net income is overstated and the income statements are unconservative.

Conservatism can scarcely be regarded as a virtue if, as its consequence, the balance sheet and income statement do not "present fairly" the financial condition and the results of operations

Consistency *Departures from consistency should be disclosed*

Changes in accounting procedures and valuation bases may have a material effect on balance sheets and income statements For instance assume that a company which has valued its inventories at cost decides to change to the more conservative basis of cost or market, whichever is lower the change in basis may cause a material reduction in the stated profit for the period in which the change is made Or a company which has regularly charged operations with a provision for bad debt losses may find that the reserve accumulated from prior provisions is adequate and that no provision for the current period need be made Although these two inconsistencies may be justifiable from the standpoint of accounting principles, the nature and amount of their effect upon the statements should be disclosed

Companies have been known to indulge in inconsistencies with the deliberate purpose of producing a desired effect upon the balance sheet and the income statement Unless the newly adopted procedures or valuation bases are in accordance with accounting principles mere disclosure is insufficient

Basis of accounts *Accounts and statements should give expression, so far as possible, to facts evidenced by completed transactions and supportable by objective data*

For purposes of discussion, the statement of this principle may be divided into three elements

(1) by completed transactions

For instance, as already pointed out, merchandising profits are not normally regarded as earned until the realization of revenue is evidenced by the completed transaction of a sale

(2) "supportable by objective data'

For instance, the selling price shown by the invoice is objective data supporting the computation to the profit

(3) "so far as possible"

Many accounting entries, such as those providing for depreciation, bad debts, and contingencies, cannot be evidenced by completed transactions nor wholly supported by objective data but must necessarily be based on estimates

It should also be pointed out that, in some instances, managerial policy may necessarily determine the selection of objective data For instance, an inventory may be valued

at cost; purchase costs may be supportable by the objective data of invoices; but if purchases have been made at different prices, a selection of prices must be made by the adoption of the first-in first-out, last-in first-out, or some other method. The choice of method thus determines the selection of the objective data used in the computation of inventory cost.

Truth and disclosure. *Statements should be truthful and should make full disclosure of significant information.*

It can be assumed that no reputable accountant would issue a statement which contains a deliberate untruth. When it is remembered that public accountants are engaged to make an independent and unbiased report on the affairs of a business for the information of third parties, it will be recognized that truthfulness embraces telling the whole truth as well as refraining from telling untruths. It is the accountant's obligation to disclose not only such matters as contingent liabilities and the pledging of assets as security to debts, but all facts which, if not reported, might make the statements misleading.

The latitude of a profession. As stated at the beginning of this chapter, there is no comprehensive code of accounting principles extending to the ramifications of procedural details. And it probably is not desirable that accounting procedures should be reduced to a rigid uniformity by any detailed statement of rules. Accounting must meet the varying requirements of different businesses operating under differing conditions, making proper choices between different procedures which are equally right for their various purposes, and must be unfettered and prepared to adjust itself to changes in the economic system. It seems desirable, therefore, that members of the accounting profession, like those of other professions, should exercise individual judgment and initiative within the framework of general principles.

CHAPTER 29

Manufacturing Cost Controls

Perpetual Inventories

Under the method of accounting for manufacturing concerns described in Chapter 22, it is necessary to take physical inventories before the statements can be prepared. Because of the labor involved in taking these physical inventories, it may be impracticable, under this method, to prepare statements more frequently than once a year. The following pages contain a description of methods of keeping perpetual inventories.

Raw Materials

Materials purchased. Let us assume that a company, at the beginning of its operations, purchased the following materials: 500 units of Material *A* at \$4.00 per unit, and 1,500 units of Material *B* at \$2.00 per unit.

The perpetual inventory of raw materials will contain a page or a card for each kind of material. After the invoice has been recorded

Material A

Date		Quantity In	Quantity Out	Quantity Balance	Price	Cost In	Cost Out	Cost Balance
19 - Feb	3	500		500	4.00	2,000.00		2,000.00

Material B

Date		Quantity In	Quantity Out	Quantity Balance	Price	Cost In	Cost Out	Cost Balance
19 - Feb	3	1,500		1,500	2.00	3,000.00		3,000.00

in the voucher register, it may be used by the perpetual inventory clerk to make entries on the cards as shown on page 436.

Materials used. Materials should not be taken from the storeroom for use in the factory without a written order, called a *requisition*, which must be approved by some person in authority. Let us assume that the two following material requisitions were issued in February:

Material Requisition

No. 1

For Production Order No. 1 Date 2/5/19--

Material	Number of Units	Cost per Unit	Amount
A	200	4.00	800.00
B	700	2.00	1,400.00
			2,200.00

Approved J.H.Z.

Material Requisition

No. 2

For Production Order No. 2 Date 2/16/19--

Material	Number of Units	Cost per Unit	Amount
A	150	4.00	600.00
B	100	2.00	200.00
			800.00

Approved J.H.Z.

The unit costs and the extended amounts were entered on the requisitions by the perpetual inventory clerk.

The material items shown by these requisitions were entered by the inventory clerk in the Out columns of the raw materials perpetual inventory records, and the balances were computed and entered on the cards by the perpetual inventory clerk, as shown on page 438.

The balances on these perpetual inventory cards show that the

Material A

Date		Quantity In	Quantity Out	Quantity Balance	Price	Cost In	Cost Out	Cost Balance
19 Feb	3	500		500	4 00	2 000 00		2 000 00
	5		200	300			800 00	1,200 00
	16		150	150			600 00	600 00

Material B

Date		Quantity In	Quantity Out	Quantity Balance	Price	Cost In	Cost Out	Cost Balance
19 Feb	3	1 500		1 500	2 00	3 000 00		3 000 00
	5		700	800			1 400 00	1,600 00
	16		100	700			200 00	1 400 00

raw materials on hand consist of Material *A*, $600 00, Material *B*, $1,400 00, total $2,000 00

Goods in Process

Production orders The perpetual inventory of goods in process is kept on sheets called *production orders* A production order is kept for each job or kind of product going through the factory

Let us assume that the company whose raw material inventory records have already been illustrated worked on two products during February Product *X* and Product *Y* Product *X* was started first, and is represented by production order 1 Product *Y* is represented by production order 2 The method of recording the material, labor, and overhead costs on these production orders is explained in the following paragraphs

Raw materials The cost of materials used is shown by the material requisitions Copies of the requisitions are given to cost clerks for entry on the production orders

Requisition Number 1 (page 437) shows that materials costing $2,200 00 were taken from stock on February 5, for use on production order 1 This amount was entered in the Raw Materials column of production order 1 (page 439)

Requisition Number 2 shows that materials costing $800 00 were

taken from stock on February 16, for use on production order 2. See entry on production order 2.

					Production Order	1	
For	800 Product X				Date Completed		
Date		Raw Materials		Direct Labor		Overhead	
19-- Feb.	5	2,200	00				

					Production Order	2	
For	200 Product Y				Date Completed		
Date		Raw Materials		Direct Labor		Overhead	
19-- Feb.	16	800	00				

Direct labor. Each factory workman keeps a record of the time spent on each production order, by punching time cards. He uses a separate card each day for each production order on which he is engaged. When the card is turned in at the office, it shows the workman's number, the production order number, and the time worked. Clerks enter the hourly wage rate and compute the total labor cost. Following are two cards turned in by one workman.

Date	2/20/--
Employee's Number	21
Hour In	8:00
Hour Out	12:00
Elapsed Time	4:00
Hourly Rate	$1.25
Amount	$5.00
Production Order	1

Date	2/20/--
Employee's Number	21
Hour In	1:00
Hour Out	4:00
Elapsed Time	3:00
Hourly Rate	$1.25
Amount	$3.75
Production Order	2

These cards are used in making up the payroll, since they show the total time and wages of each employee The cards of all workmen are then sorted according to the production order numbers, and a summary is prepared showing the total direct labor cost applicable to each production order The direct labor cost incurred during February on each production order is shown by the summary

Production Order Direct Labor Cost Summary

Production Order	Payroll Periods: Feb 1 to 15		Payroll Periods: Feb 16 to 28	
1	1,000	00	200	00
2			800	00
	1,000	00	1,000	00

The direct labor costs shown by the labor cost summary were entered on the two production orders as shown below

Production Order 1

For 800 Product X Date Completed

Date		Raw Materials		Direct Labor		Overhead	
19 Feb	5	2,200	00				
	15			1 000	00		
	28			200	00		

Production Order 2

For 200 Product Y Date Completed

Date		Raw Materials		Direct Labor		Overhead	
19 - Feb	16	800	00				
	28			800	00		

Production order 1 was charged with $1,000.00 and $200.00 of direct labor.

Production order 2 was charged with $800.00 of direct labor.

Manufacturing expense, or overhead. The material and labor costs applicable to each production order can be definitely determined by the methods just explained. Overhead expenses must be estimated. This may be done as follows: If, in the past, the annual manufacturing expense has been about 50% of the annual direct labor cost, it may be assumed that this ratio will continue. Therefore, when the labor cost is entered on the production orders, the manufacturing expense may be estimated as 50% of the labor cost.

It is assumed that 50% is a fair overhead rate for the concern under illustration. Therefore, the cost clerk, after entering the direct labor cost on the production orders, also entered overhead charges equal to 50% of the direct labor costs, as shown below:

Production Order 1

For 800 Product X

Date Completed

Date		Raw Materials		Direct Labor		Overhead	
19-- Feb.	5	2,200	00				
	15			1,000	00	500	00
	28			200	00	100	00

Production Order 2

For 200 Product Y

Date Completed

Date		Raw Materials		Direct Labor		Overhead	
19-- Feb.	16	800	00				
	28			800	00	400	00

Product X has been completed, and the production order has been removed from the work in process binder. Product Y is the

only order in process at the end of February, production order 2 shows the total cost of work in process—$2,000 00.

Finished Goods

Completed production orders. After Product *X* (see production order 1) was completed, the production order was summarized to determine the total cost and the unit cost, as shown below:

					Production Order 1		
For 800 Product X					Date Completed 2/20		
Date		Raw Materials		Direct Labor		Overhead	
19-- Feb	5	2,200	00				
	15			1,000	00	500	00
	28			200	00	100	00
Total		2,200	00	1,200	00	600	00
Summary							
	Material					2,200	00
	Direct Labor					1,200	00
	Overhead					600	00
		Total				4,000	00
Unit cost (Quantity produced 800)						5	00

This production order furnished the information for the following entry on the perpetual inventory card for Product *X*:

Product X												
Date		Quantity			Unit Cost		Cost					
		In	Out	Balance			In		Out		Balance	
19-- Feb	20	800		800	5	00	4,000	00			4,000	00

Finished goods sold. On February 27, a sale of 500 units of Product *X* was made. The carbon copy of the invoice is provided with a Cost column at the right of the Selling Price column. This carbon is sent to the inventory clerk, who performs the following operations:

(1) Looks up the unit price on the finished goods inventory card.
(2) Computes the total cost of the goods sold and enters this cost in the Cost column of the carbon of the invoice, thus:

(Heading of the Invoice)							
Number	Description	Unit Price		Amount		Cost	
500	Article X	7	00	3,500	00	2,500	00

(3) Makes entries in the Out columns of the inventory card, showing the number and the cost of the articles sold, and computes the new quantity and cost balances. (See below.)
(4) Sends the carbon of the invoice back to the office for entry in the sales book.

The inventory card for Product *X* now appears as follows:

Product X														
Date		Quantity			Unit Cost		Cost						
		In	Out	Balance			In		Out		Balance	
19-- Feb.	20	800		800	5	00	4,000	00			4,000	00
	27		500	300					2,500	00	1,500	00

Since Product *X* is the only article of finished goods on hand, this one card shows the total cost of the finished goods inventory at the end of February—$1,500.00.

Inventory Controlling Accounts

The raw material inventory cards show the units and costs of raw materials on hand; the production orders show the units and

accumulated costs of goods in process, the finished goods inventory cards show the units and costs of finished goods on hand

In a large business there may be thousands of these inventory cards and production orders, and the preparation of monthly statements will be greatly facilitated if the following controlling accounts are kept in the general ledger

Raw Materials —with a balance equal to the sum of all the balances on the raw material inventory cards

Goods in Process—with a balance equal to the sum of all the balances on the production orders for goods still in process

Finished Goods —with a balance equal to the sum of all the balances on the finished goods inventory cards

Such controlling accounts not only facilitate the preparation of the monthly profit and loss statements and balance sheets but also serve as checks upon the accuracy of the subsidiary perpetual inventory records of raw materials goods in process, and finished goods

We shall now see how such accounts can be produced For purposes of illustration, we shall begin with expenditures for material, labor, and overhead, and trace the flow of these costs through goods in process into finished goods The illustration will be based on the same assumed facts as those used on the preceding pages in illustrating the perpetual inventory records

Material, labor, and overhead accounts Assume that the expenditures during February for material labor, and manufacturing expenses were

(a) Raw materials		\$5 000 00
(b) Direct labor		2 000 00
(c) Manufacturing expenses		
Indirect labor	\$500 00	
Factory supplies	300 00	
Power	220 00	1 020 00

These expenditures are recorded exactly as they were under the method of accounting described in Chapter 22, with one exception one Raw Materials account is used instead of a Raw Materials Purchases account and a Raw Materials Inventory account The accounts showing charges for these costs appear below

Raw Materials		Direct Labor		Manufacturing Expense (Control)	
(a) Cost 5 000		(b) Paid 2 000		(c) 1 020	

Raw materials used. The raw materials taken from stock for use in the factory are shown by the material requisitions. (See illustrative requisitions on page 437.) These requisitions should be listed in a requisition register, as follows:

Requisition Register

Date		Requisition No.	Amount	
19--				
Feb.	5	1	2,000	00
	16	2	800	00
			3,000	00

The requisition register is footed at the end of the month, and the following journal entry is made:

(d) Goods in Process	3,000.00	
Raw Materials . .		3,000.00
To transfer the cost of raw materials used during the month out of the Raw Materials account, and into Goods in Process		

Direct labor spent on goods in process. The production order direct labor cost summary (see page 440) shows the amount of direct labor charged to each production order. The totals of the summary show that \$2,000.00 of direct labor was charged to the production orders during the month. Therefore, at the end of the month, the following journal entry is made transferring the labor cost shown by the summary into the Goods in Process account:

(e) Goods in Process	2,000.00	
Direct Labor.. . ..		2,000.00
To charge Goods in Process with the total direct labor cost entered on the production orders.		

Manufacturing expenses charged to goods in process. This company is using an overhead rate of 50%; that is, the estimated overhead charged to each production order is 50% of the direct labor. Since \$2,000.00 of direct labor was charged to the production orders, the total overhead charge was \$1,000.00. This amount is charged into Goods in Process by the following journal entry:

(f) Goods in Process.	1,000.00	
Manufacturing Expense Applied.		1,000.00
To charge Goods in Process with the total overhead applied to the production orders		

Ledger accounts after transferring costs into goods in process After the material labor, and overhead costs for the month are transferred to the Goods in Process account, the accounts affected contain the following amounts

Raw Materials		*Direct Labor*		Manufacturing Expense (*Control*)	
(a) Cost 5 000	(d) Used 3 000	(b) Paid 2 000	(e) Used 2 000	(c) 1 020	

Manufacturing Expense Applied	
	(f) 1 000

The Raw Materials account has a debit balance of $2 000 00, representing the cost of all raw materials on hand at the end of February The costs of the individual items of raw material are shown by the perpetual inventory cards (see page 438) Material A, $600 00 Material B $1,400 00

The Direct Labor account has no balance All the direct labor has been applied to the cost of goods in process

The Manufacturing Expense account has a debit balance of $1 020 00 the Manufacturing Expense Applied account has a credit balance of $1 000 00 Twenty dollars of expense has not been applied because of a slight error in the estimated burden rate of 50% Methods of disposing of this $20 00 are discussed on page 448

The following account (produced by posting the three journal entries illustrated) shows the total material labor, and overhead charged to production during the month

Goods in Process		
(d) Raw materials	3 000 00	
(e) Direct labor	2 000 00	
(f) Manufacturing expense	1 000 00	

Cost of goods finished When goods are finished the production order is summarized (see production order No 1 page 442) and taken from the goods in process binder The total cost is entered in a register of completed production orders thus

Register of Completed Production Orders

Date		Production Order Number	Total Cost	
19 Feb	20	1	4 000	00

At the end of the month, the register is totaled, and the cost of goods finished during the month is transferred out of Goods in Process into Finished Goods by the following journal entry:

(g) Finished Goods.....	4,000.00	
Goods in Process.		4,000.00
Total cost of goods completed during the month.		

After this entry is posted, the two accounts affected contain the following amounts:

Goods in Process

(d) Raw materials..............	3,000.00	(g) Finished goods.............	4,000.00
(e) Direct labor...........	2,000.00		
(f) Manufacturing expense.	1,000.00		

Finished Goods

(g) Manufactured..............	4,000.00		

The Goods in Process account has a debit balance of $2,000.00, representing the cost of goods in process at the end of February. Details are shown on production order 2, which is the only order in process at the end of the month.

Cost of goods sold. As shown on page 443, the carbons of the invoices are provided with a column in which a clerk enters the cost of the goods sold. Invoices are recorded in the manner shown in the following sales book:

Sales Book

Date		Name	Invoice Number	Selling Price		Cost	
19-- Feb.	27	Henderson & Riley	1	3,500	00	2,500	00
				(1120- 4001)		(4002- 1151)	

At the end of the month the two columns are totaled, and the totals are posted as follows:

Total of Selling Price column:
(h) Debit Accounts Receivable controlling account (1120)
Credit Sales (4001)

Total of Cost column:
(i) Debit Cost of Sales (4002)
Credit Finished Goods (1151)

The accounts affected (except Accounts Receivable) will contain the following amounts

	Finished Goods		(1151)
(g) Manufactured	4 000 00	(i) Sold	2 500 00

The debit balance of this account shows the cost of finished goods still on hand Details are shown on the finished goods perpetual inventory cards

	Sales		(4001)
		(h)	3 500 00

	Cost of Sales		(4002)
(i)	2 500 00		

The difference between the debit balance in the Cost of Sales account, and the credit balance in the Sales account, is the gross profit for the month Thus, the gross profit on sales can be determined from the books without taking physical inventories

Summary

The entries in the general ledger cost control accounts and the subsidiary records under this system of accounting are summarized on pages 449 and 450, and the methods of accounting described in Chapter 22 and in this chapter are compared on page 451

Underabsorbed and Overabsorbed Burden

To illustrate the various methods of dealing with underabsorbed and overabsorbed manufacturing expense let us assume that the manufacturing expense accounts at the end of the year have the following balances

Manufacturing Expense (Control)	$11 000 00	
Manufacturing Expense Applied		$10 500 00

The actual expenses were $11 000 00 the amount applied to the production orders was only $10 500 00

The $500 00 balance of unabsorbed burden may be treated in several ways, as follows

(1) Theoretically, it should be apportioned to finished goods sold, finished goods on hand, and goods in process by a journal entry similar to the following

Cost of Sales	425 00	
Finished Goods	60 00	
Goods in Process	15 00	
Manufacturing Expense Applied		500 00

Summary of Entries in the General Ledger Accounts and in the Subsidiary Records, Using the Method of Accounting Described in This Chapter

	General Ledger	Subsidiary Records
Purchase of Materials	Debit Raw Materials—total of Raw Materials column of voucher register.	Enter details in the In columns of the perpetual inventory cards, using facts shown by suppliers' invoices.
Direct Labor Payments	Debit Direct Labor—total of Voucher Register column.	
Payment of Manufacturing Expenses	Debit Manufacturing Expense—voucher register entries, etc.	
Materials Put Into Process . .	Credit Raw Materials—total of material requisition register.	Enter details in Out columns of raw material inventory cards, from material requisitions.
	Debit Goods in Process—total of material requisition register.	Enter in Material column of production orders, from material requisitions.
Direct Labor on Goods in Process	Debit Goods in Process and credit Direct Labor—journal entry using amount shown by direct labor cost summary.	Enter in Labor column of production orders, from direct labor cost summary.
Manufacturing Expense Applied . .	Debit Goods in Process and credit Manufacturing Expense Applied—journal entry, amount being based on labor cost summary.	Enter in Overhead column of production orders, amounts being obtained by multiplying the labor cost on the production order by an overhead rate.

Summary of Entries in the General Ledger Accounts and in the Subsidiary Records, Using the Method of Accounting Described in This Chapter (Concluded)

	General Ledger	Subsidiary Records
Finished Goods Completed	Credit Goods in Process—total of register of completed production orders	Foot the production orders for the completed goods and remove them from the goods in process binder
	Debit Finished Goods—total of register of completed production orders	Enter in In columns of finished goods perpetual inventory cards, using amounts shown by production orders
Finished Goods Sold	Debit Cost of Sales and credit Finished Goods—total of Cost column of sales book Debit Accounts Receivable and credit Sales—total of Selling Price column of sales book	Enter in Out column of finished goods perpetual inventory record, using information shown by the invoice

Comparison of Method Described in This Chapter with Method Described in Chapter 22

	Method Described in Chapter 22	Method Described in This Chapter
Profits and losses on various commodities	Although the statement of cost of goods manufactured illustrated in Chapter 22 shows the cost of *all* finished goods manufactured during the period, the accounting system does not show the cost of *each kind* of product manufactured. Therefore, the profit or loss on the sale of each kind of commodity cannot be ascertained with accuracy, and the management is left with inadequate information as to the profit derived from each product	The cost of each product is shown by the production orders. Each invoice shows the selling price of the articles sold, and also the cost thereof. The total profit on each commodity and the profit on each sale can thus be easily ascertained.
Physical *vs.* perpetual inventories. . .	Under the Chapter 22 method, it is necessary to take physical inventories of raw materials, goods in process, and finished goods before a statement of cost of goods manufactured, a profit and loss statement, and a balance sheet can be prepared. Because of the labor involved in taking these inventories, it may be impracticable to prepare statements more frequently than once a year	Under the method of accounting described in this chapter, the values of raw materials, goods in process, and finished goods can be determined from the books, without taking physical inventories. This facilitates the preparation of monthly statements, which are of great importance if the management is to keep a close watch over the operations of the business. (Periodical physical inventories should be taken to check the perpetual inventories.)
Inventory values.	Since the accounting system described in Chapter 22 does not show the cost of each kind of product manufactured, and the accumulated cost of goods in process, the values used in taking physical inventories of finished goods and goods in process are often mere estimates of the cost.	Since the accounting system described in this chapter shows the cost of each product and the costs incurred on goods still in process, the inventory values can be much more accurately determined.

(2) If the greater portion of the finished goods manufactured has been sold, it is reasonably correct to charge the entire unabsorbed burden to Cost of Sales, as follows

Cost of Sales	500 00	
Manufacturing Expense Applied		500 00

(3) In some cases the unabsorbed expense is charged to a deferred expense account by an entry similar to the following

Deferred Manufacturing Expense	500 00	
Manufacturing Expense Applied		500 00

When this method is followed the Deferred Manufacturing Expense appears on the asset side of the balance sheet, and the overhead rate for the following year may be increased This procedure is of very doubtful propriety, since it fails to give recognition to the fact that costs should be properly allocated by periods and that expired costs should not be carried in the accounts as assets

Adjustments for overabsorbed burden may be made similarly, that is, (1) by credits to Cost of Sales, Finished Goods, and Goods in Process, (2) by credit to Cost of Sales or (3) by setting up a deferred credit account

After one of the foregoing entries has been made at the end of the year to bring the credit balance of the Manufacturing Expense Applied account into exact agreement with the balance in the Manufacturing Expense control account, these accounts are closed by an entry similar to the following

Manufacturing Expense Applied	11 000 00	
Manufacturing Expense		11 000 00
To close the manufacturing expense accounts		

Closing the Books

The procedure of closing the books and preparing working papers and statements at the end of the period is illustrated in the following pages of this chapter The illustration is based on the trial balance on page 453

Salesmen's salaries in the amount of $200 00 are accrued and unpaid at the end of the year

The adjusting and closing entries follow

(1) Make adjustments for any deferred and accrued items

Selling Expense	200 00	
Accrued Salaries		200 00
To set up accrual		

THE *X Y Z* COMPANY
Trial Balance
December 31, 19—

Cash	75,000 00	
Accounts Receivable	10,000 00	
Finished Goods	15,000 00	
Goods in Process	1,500 00	
Raw Materials	5,000 00	
Vouchers Payable		6,000 00
Capital Stock		50,000 00
Earned Surplus		43,500 00
Sales		100,000 00
Cost of Sales	75,000 00	
Manufacturing Expense	14,000 00	
Manufacturing Expense Applied		13,000 00
Selling Expense	12,000 00	
General Expense	5,000 00	
	212,500 00	212,500 00

(2) Write off the unabsorbed manufacturing expense. For purposes of illustration we shall write off the entire unabsorbed manufacturing expense to Cost of Sales.

Cost of Sales	1,000 00	
Manufacturing Expense Applied		1,000 00
To apply the unabsorbed manufacturing expense to cost of goods sold.		

Close out the Manufacturing Expense account against Manufacturing Expense Applied.

Manufacturing Expense Applied	14,000 00	
Manufacturing Expense		14,000 00
To close.		

(3) Make the general closing entries:

Sales	100,000 00	
Profit and Loss		100,000 00
To close the Sales account		
Profit and Loss	76,000 00	
Cost of Sales		76,000 00
To close the Cost of Sales account.		
Profit and Loss	12,200 00	
Selling Expense		12,200 00
To close the selling expenses.		
Profit and Loss	5,000 00	
General Expense		5,000 00
To close the general expenses		
Profit and Loss	6,800.00	
Earned Surplus		6,800 00
To transfer the net profit to Surplus.		

Working Papers

The adjustments for accrued and deferred items are made in the working papers on page 455 in the manner with which you are already familiar (See entry *a*) The Adjustments columns also contain the debits and credits of the entries

(b) Applying the unabsorbed manufacturing expense against the cost of sales
(c) Closing the Manufacturing Expense account against the Manufacturing Expense Applied Account

Statements

The following statement of profit and loss statement of surplus, and balance sheet were prepared from the working papers

THE *X Y Z* COMPANY — Exhibit C

Statement of Profit and Loss

For the Year Ended December 31 19—

Sales	$100 000 00
Cost of Goods Sold	76 000 00
Gross Profit on Sales	$ 24 000 00
Selling Expenses	12 200 00
Net Profit on Sales	$ 11 800 00
General Expenses	5 000 00
Net Income	$ 6 800 00

THE *X Y Z* COMPANY — Exhibit B

Statement of Earned Surplus

For the Year Ended December 31, 19—

Balance December 31 19—	$43 500 00
Net Income per Exhibit C	6 800 00
Balance December 31 19—	$50 300 00

THE *X Y Z* COMPANY — Exhibit A

Balance Sheet

December 31, 19—

Assets		Liabilities and Net Worth	
Cash	$ 75 000 00	Vouchers Payable	$ 6 000 00
Accounts Receivable	10 000 00	Accrued Salaries	200 00
Finished Goods	15 000 00	Capital Stock	50 000 00
Goods in Process	1 500 00	Earned Surplus per Exhibit B	50 300 00
Raw Materials	5 000 00		
	$106 500 00		$106 500 00

THE *X Y Z* COMPANY
Working Papers
Year Ended December 31, 19—

	Trial Balance		Adjustments		Profit and Loss		Surplus		Balance Sheet	
Cash........	75,000								75,000	
Accounts Receivable	10,000								10,000	
Finished Goods	15,000								15,000	
Goods in Process	1,500								1,500	
Raw Materials. .	5,000								5,000	
Vouchers Payable. .		6,000								6,000
Capital Stock ..		50,000								50,000
Earned Surplus... .		13,500						43,500		
Sales...........		100,000				100,000				
Cost of Sales	75,000		(b) 1,000		76,000					
Manufacturing Expense	11,000			(c) 11,000						
Manufacturing Expense Applied		13,000	(c) 11,000	(b) 1,000						
Selling Expense. ..	12,000		(a) 200		12,200					
General Expense...	5,000				5,000					
	212,500	212,500								
Accrued Salaries				(a) 200						200
			15,200	15,200						
Net Income—to Earned Surplus...........					6,800			6,800		
					100,000	100,000				
Earned Surplus, December 31, 19—.............							50,300			50,300
							50,300	50,300	106,500	106,500

CHAPTER 30

Analysis of Statements

Statements with Analytical Per Cents

Analytical per cents Analysis is the process of resolving a thing into its elements or an examination of the component parts in relation to the whole The expression *analytical per cents* is, therefore, intended to describe such per cents as the per cent of each balance sheet item to the balance sheet total, or the per cent of each profit and loss statement item to the net sales or the per cent of each item of selling expense to the net sales The analysis of a statement by the computation of analytical per cents is sometimes called *vertical analysis* because the per cents apply to related amounts usually shown in a column

Balance sheet with analytical per cents Following is an illustration of a balance sheet with analytical per cents

SPECIALTY PRODUCTS COMPANY
Balance Sheet
December 31, 1949

Assets	Amount	Per Cent of Total
Current Assets		
Cash	$ 35 005 00	6 53%
Accounts Receivable—Less Reserve for Bad Debts	109 105 00	20 37
Notes Receivable	31 110 00	5 81
Total Cash and Net Receivables	$175 220 00	32 71%
Inventories		
Finished Goods	$ 34 685 00	6 47%
Goods in Process	24 160 00	4 51
Raw Materials	31 515 00	5 88
Total Inventories	$ 90 360 00	16 86%
Total Current Assets	$265 580 00	49 57%
Fixed Assets		
Land	$ 40 300 00	7 52%
Buildings	*$215 375 00*	
Less Reserve for Depreciation	*50 275 00*	
Cost Less Depreciation	$165 100 00	30 82
Machinery and Equipment	$ 84 400 00	
Less Reserve for Depreciation	26 370 00	
Cost Less Depreciation	$ 58 030 00	10 83
Furniture and Fixtures	$ 9 450 00	
Less Reserve for Depreciation	2 700 00	
Cost Less Depreciation	$ 6 750 00	1 26
Total Fixed Assets—Net	$270 180 00	50 43%
	$535 760 00	100 00%

Liabilities and Net Worth

Current Liabilities:		
Accounts Payable	$ 58,670.00	10.95%
Notes Payable	45,000.00	8.40
Accrued Expenses	7,450.00	1.39
Total Current Liabilities	$111,120.00	20.74%
Fixed Liabilities:		
Bonds Payable	100,000 00	18.67
Total Liabilities	$211,120.00	39.41%
Net Worth:		
Capital Stock	$250,000.00	46.66%
Earned Surplus	74,640.00	13.93
Total Net Worth	$324,640 00	60.59%
	$535,760.00	100.00%

Operating statements with analytical per cents. The following statements illustrate analytical per cents:

SPECIALTY PRODUCTS COMPANY
Statement of Profit and Loss
For the Year Ended December 31, 1949

	Amount	Per Cent of Net Sales
Gross Sales	$981,650.00	102 18%
Returned Sales and Allowances	21,045.00	2.18
Net Sales	$963,605.00	100 00%
Cost of Goods Sold	702,415 00	72.89
Gross Profit on Sales	$261,190.00	27.11%
Selling Expenses	150,480.00	15 62
Net Profit on Sales	$110,710.00	11.49%
General Expenses	75,305.00	7.82
Net Profit on Operations	$ 35,405.00	3.67%
Net Other Income	2,210.00	.23
Net Income	$ 37,615.00	3.90%

SPECIALTY PRODUCTS COMPANY
Schedule of Selling Expenses
For the Year Ended December 31, 1949

	Amount	Per Cent of Net Sales	Per Cent of Total Selling Expense
Advertising	$ 53,310.00	5.53%	35.43%
Sales Salaries and Commissions	46,650.00	4.85	31.00
Traveling Expense	10,510.00	1 09	6 98
Freight Out	7,045.00	.73	4 68
Delivery Expense	6,910.00	.72	4.59
Branch Office Expense	19,750.00	2 05	13.13
Miscellaneous	6,305 00	.65	4.19
Total	$150,480 00	15 62%	100 00%

Significance of analytical per cents Analytical per cents have some significance, for instance, it is interesting to learn, by an examination of the statements of Specialty Products Company, that

The current assets and the fixed assets were 49 57% and 50 43%, respectively of the total assets instead of, say, 25% and 75%
The liabilities and proprietorship equity represent, respectively, 39 41% and 60.59% of the total rather than, say, 60% and 40%
The gross profit is 27 11% of the net sales instead of, say, 10%

However, the usefulness of analytical per cents is limited because, usually, there are no standard per cents against which they can be measured. For instance although the profit and loss statement shows that the gross profit per cent was 27 11%, we do not know whether this is a reasonable rate of gross profit for the industry

Comparative statements with analytical per cents Information of somewhat greater significance is furnished by a comparative statement with analytical per cents Such a statement is illustrated below

SPECIALTY PRODUCTS COMPANY
Comparative Statement of Profit and Loss
For the Years Ended December 31, 1949 and 1948

	Amounts Year Ended December 31		Per Cents of Net Sales Year Ended December 31	
	1949	1948	1949	1948
Gross Sales	$984 650 00	$736 700 00	102 18%	104 19%
Returned Sales and Allowances	21 045 00	29 590 00	2 18	4 19
Net Sales	$963 605 00	$707 110 00	100 00%	100 00%
Cost of Goods Sold	702 415 00	551,300 00	72 89	77 97
Gross Profit on Sales	$261 190 00	$155 810 00	27 11%	22 03%
Selling Expenses	150 480 00	92 650 00	15 62	13 10
Net Profit on Sales	$110 710 00	$ 63 160 00	11 49%	8 93%
General Expenses	75,305 00	51 760 00	7 82	7.32
Net Profit on Operations	$ 35 405 00	$ 11 400 00	3 67%	1 61%
Net Other Income	2,210 00	600 00	23	09
Net Income	$ 37 615 00	$ 12 000 00	3 90	1 70%

A comparison of the analytical per cents in a series of statements may be helpful in indicating trends For instance, the foregoing statement shows that the ratio of sales returns and allowances to net sales has decreased, that the rate of gross profit has increased, and that the rate of net income has increased However, a word of caution is in order Per cents are computed by dividing one amount, called the *percentage*, by another amount, called the *base*

For instance, the expense per cents in the foregoing statement were computed by dividing the expense (the percentage) by the net sales (the base). A change in a per cent can be caused by a change in the percentage, a change in the base, or changes in both. As a consequence, changes in analytical per cents are not very significant. For instance, the foregoing statement shows that the per cent of general expenses increased from 7.32% to 7.82%: this might be thoughtlessly interpreted as indicating a very slight increase in general expenses; actually, the general expenses increased $23,545.00 or about 45%. The increase in the per cent of general expenses was small (from 7.32% to 7.82%) because the increase in the expense was nearly offset by a 36% increase in sales. The analytical per cents in the foregoing statement do not bring to the attention of the management this really significant question: Was a 45% increase in general expenses justified in view of the fact that the sales increased 36%?

Statements with Per Cents of Increase and Decrease

Per cents of increase and decrease. The determination of per cents of increase and decrease, as shown in the following statement, is sometimes called *horizontal* analysis, because the amounts used in the computation of a per cent of increase or decrease are usually shown on the same line of a statement.

SPECIALTY PRODUCTS COMPANY
Condensed Comparative Statement of Profit and Loss
For the Years Ended December 31, 1949 and 1948

	Year Ended December 31,		Increase—Decrease*	
	1949	1948	Amount	Per Cent
Gross Sales.	$984,650.00	$736,760.00	$247,890.00	33.6%
Returned Sales and Allowances	21,045.00	29,650.00	8,605.00*	29.0*
Net Sales.	$963,605.00	$707,110.00	$256,495.00	36.3
Cost of Goods Sold .	702,415.00	551,300.00	151,115.00	27.4
Gross Profit on Sales .	$261,190.00	$155,810.00	$105,380.00	67.6
Selling Expenses .	150,480.00	92,650.00	57,830.00	62.4
Net Profit on Sales.	$110,710.00	$ 63,160.00	$ 47,550.00	75.3
General Expenses	75,305.00	51,760.00	23,545.00	45.5
Net Profit on Operations. . . .	$ 35,405.00	$ 11,400.00	$ 24,005.00	210.6
Net Other Income.	2,210.00	650.00	1,560.00	240.0
Net Income.	$ 37,615.00	$ 12,050.00	$ 25,565.00	212.2

The per cents shown in this statement seem to be more informative than the analytical per cents shown in the statement on page 458. They show a number of interesting changes in the results of operations, which are mentioned on the following page.

The gross sales increased 33 6%, whereas the returned sales and allowances decreased 29 0%, with the result that the net sales increased 36 3%

The 36 3% increase in net sales was accompanied by an increase in cost of goods sold of only 27 4% with the result that the gross profit increased 67 6%

The increases in selling and general expenses were relatively greater than the increase in net sales Selling expenses increased 62 4% and general expenses increased 45 5%, compared with the 36 3% increase in net sales

The net other income increased 240 0% however, since this income was relatively small in both years, the increase did not greatly affect the net income

The net income increased 212 2%

Computation of per cents of increase and decrease Following are illustrations of some problems which arise in the determination of per cents of increase and decrease the asterisks indicate entries in red ink.

	This Year	Last Year	Increase—Decrease*	
			Amount	Per Cent
Cases in which there were positive amounts last year				
Statement Item				
A	$1 500 00	$1 000 00	$ 500 00	50%
B	500 00	1 000 00	500 00*	50*
C	—	1 000 00	1 000 00*	100*
D	500 00*	1 000 00	1 500 00*	150*
Cases in which there were no amounts last year				
Statement Item				
E	1 500 00	—	1 500 00	—
F	500 00*	—	500 00*	—
Cases in which there were negative amounts last year				
Statement Item				
G	1 500 00*	1 000 00*	500 00*	—
H	500 00	1 000 00*	1 500 00	—
I	—	1 000 00*	1 000 00	—

The computations of the per cents for items *A*, *B*, *C*, and *D* are obvious No per cents can be computed for items *E* and *F* because, in each instance, there is no last-year amount to serve as a base and none can be computed for items *G*, *H*, and *I* because the last-year amounts are negative

Positive and negative (black and red) amounts sometimes appear on the same line (as in item *H*) in comparative statements which, for reasons of condensation, show only differences between certain debit and credit balances. For instance, assume that a complete profit and loss statement shows the following items:

	This Year	Last Year
Net Profit on Operations	$31,500.00	$29,860.00
Add Other Income:		
Interest Income	$ 1,200.00	$ 900.00
Discount on Purchases	2,500.00	2,100.00
Total Other Income	$ 3,700.00	$ 3,000.00
Net Profit on Operations and Other Income	$35,200 00	$32,860.00
Deduct Other Expense:		
Interest Expense	$ 750.00	$ 1,100.00
Discount on Sales	2,200.00	2,800 00
Total Other Expense	$ 2,950.00	$ 3,900 00
Net Income. .	$32,250.00	$28,960.00

A condensed statement might show the net amounts of the other income and expense, as follows:

	This Year	Last Year
Net Profit on Operations	$31,500.00	$29,860.00
Other Income (Expense*) Net .	750 00	900.00*
Net Income	$32,250 00	$28,960 00

Ratios expressed decimally. The relation of an amount for a later date or period to an amount for an earlier date or period may be expressed decimally, as shown in the comparative balance sheet on page 462. The ratios are computed by dividing the amounts for the later date by the amounts for the earlier date.

Although such ratios are less commonly used than per cents of increase and decrease, they have some advantages. In the first place, per cents of decrease must be shown in red ink or in some other manner to distinguish them from per cents of increase: this somewhat increases the work of preparing the statement and may cause some confusion in interpreting it. In the second place, it is probably difficult for many persons to grasp the significance of large per cents, such as a 1,400% increase: it is much easier to understand that one item is 15 times as large as another item.

The ratio of the net sales for the current year to the net sales for the preceding year is of some value in interpreting the ratios which indicate the changes in balance sheet items. For instance, remembering that the net sales for 1949 were 1.36 times the net sales for 1948, we find it interesting to note that the net accounts receivable at the end of 1949 were 1.32 times those at the end of 1948, but

SPECIALTY PRODUCTS COMPANY
Comparative Balance Sheet
December 31, 1949 and 1948

	December 31, 1949	December 31, 1948	Increase—Decrease*	Ratio 1949 to 1948
Assets				
Current Assets				
Cash	$ 35,005 00	$ 10,600 00	$24,405 00	3 30
Accounts Receivable—Less Reserve for Bad Debts	109,105 00	82,450 00	26,655 00	1 32
Notes Receivable	31,110 00	19,350 00	11,760 00	1 61
Total Cash and Net Receivables	$175,220 00	$112,400 00	$62,820 00	1 56
Inventories				
Finished Goods	$ 34,685 00	$ 36,875 00	$ 2,190 00*	94
Goods in Process	24,160 00	27,515 00	3,355 00*	88
Raw Materials	31,515 00	44,060 00	12,545 00*	72
Total Inventories	$ 00 360 00	$108,450 00	$18,090 00*	83
Total Current Assets	$265 580 00	$220 850 00	$44 730 00	1 20
Fixed Assets				
Land	$ 40 300 00	$ 40,300 00	—	1 00
Buildings	$215 375 00	$210,410 00	$ 4,965 00	1 02
Less Reserve for Depreciation	50 275 00	41 660 00	8,615 00	1 21
Cost Less Depreciation	$165 100 00	$168,750 00	$ 3,650 00*	98
Machinery and Equipment	$ 84,400 00	$ 80 060 00	$ 4,340 00	1 05
Less Reserve for Depreciation	26,370 00	17,930 00	8,440 00	1 47
Cost Less Depreciation	$ 58 030 00	$ 62,130 00	$ 4,100 00*	93
Furniture and Fixtures	$ 9,450 00	$ 8,760 00	$ 690 00	1 08
Less Reserve for Depreciation	2,700 00	1,755 00	945 00	1 54
Cost Less Depreciation	$ 6,750 00	$ 7 005 00	$ 255 00*	96
Total Fixed Assets—Net	$270 180 00	$278 185 00	$ 8 005 00*	97
	$535,760 00	$499,035 00	$36 725 00	1 07
Liabilities and Net Worth				
Current Liabilities				
Accounts Payable	$ 58,670 00	$ 71,940 00	$13,270 00*	82
Notes Payable	45,000 00	60 000 00	15,000 00*	75
Accrued Expenses	7,450 00	5,070 00	2 380 00	1 47
Total Current Liabilities	$111,120 00	$137,010 00	$25,890 00*	81
Fixed Liabilities				
Bonds Payable	100 000 00	100,000 00	—	1 00
Total Liabilities	$211,120 00	$237,010 00	$25,890 00*	89
Net Worth:				
Capital Stock	$250,000 00	$200,000 00	$50,000 00	1 25
Earned Surplus	74,640 00	62,025 00	12,615 00	1 20
Total Net Worth	$324 640 00	$262 025 00	$62,615 00	1 43
	$535,760 00	$499,035 00	$36,725 00	1 07
Net Sales for the Year Ended on the Stated Date	$963,605 00	$707,110 00	$256,495 00	1 36

the total inventories at the end of 1949 were only .83 of the inventories at the end of 1948.

Comparison of more than two statements. If comparative statements include data for more than two periods or as of more than two dates, there are two available bases for computing amounts of increases and decreases.

(1) Comparisons may be made with data for the immediately preceding period or date, thus:

	Year Ended December 31,			Increase—Decrease*	
	1949	1948	1947	1949 1948	1948 1947
Sales...............	$205,000.00	$180,000.00	$210,000.00	$ 25,000.00	$30,000.00*

(2) Or comparisons may be made with data for the earliest date or period, thus:

	Year Ended December 31,			Increase—Decrease*	
	1949	1948	1947	1949 1947	1948 1947
Sales...............	$205,000.00	$180,000.00	$210,000.00	$ 5,000.00*	$30,000.00*

It might seem that the same two bases of comparison could also be used to show per cents of increase and decrease, or ratios. That is:

(1) The per cents or ratios might be based on data for the immediately preceding date or period, thus:

	Year Ended December 31,			Per Cent of Increase—Decrease*	
	1949	1948	1947	1949 1948	1948 1947
Sales...............	$205,000.00	$180,000.00	$210,000.00	14%	14%*

(2) Or the per cents or ratios might be based on data for the earliest date or period, thus:

	Year Ended December 31,			Per Cent of Increase—Decrease*	
	1949	1948	1947	1949 1947	1948 1947
Sales...............	$205,000.00	$180,000.00	$210,000.00	2%*	14%*

But per cents of increase and decrease, or ratios, based on the data for the immediately preceding date or period are likely to be misleading. For instance, the statement prepared by method 1

above shows that the sales decreased 14% in 1948 and increased 14% in 1949, if one considered only the per cents, he might jump to the incorrect conclusion that the increase in 1949 offset the decrease in 1948 Such a conclusion would not be reached by a reader of the statement prepared by method 2 above, this statement shows that, although some of the 1948 decrease was recovered in 1949, the sales for 1949 were still 2% below those for 1947

The confusion which may result from the use of method 1 arises, of course, from the fact that the per cents were computed on two bases the per cent of decrease in 1948 was computed on a base of $210,000 00 whereas the per cent of increase in 1949 was computed on a base of $180,000 00

Current Position Ratios

Working capital ratio In the analysis of the statements of a business, great stress is laid on the working capital ratio, or ratio of current assets to current liabilities Bankers usually feel that a company's current assets should be at least twice the amount of its current liabilities, to make the company a desirable risk for short-term credit The working capital ratio is computed as follows

	December 31		Increase
	1949	1948	Decrease*
Current assets	$265 580 00	$220 850 00	$44 730 00
Current liabilities	111 120 00	137 010 00	25 890 00*
Net current assets or working capital	$154 460 00	$ 83 840 00	$70 620 00
Working capital ratio (dollars of current assets per dollar of current liabilities)	$2 39	$1 61	$ 78

Distribution and movement The old reliance on a 2 to 1 working capital ratio as an adequate measure of short-term credit standing is rapidly disappearing Bankers realize that the working capital ratio alone is not sufficiently informative, and that consideration should also be given to the distribution of current assets and to their movement Movement means conversion into cash Following sections in this chapter contain discussions of some measures *of distribution and movement, these measures are*

As to distribution
- Acid test ratio
- Percentage distribution
- Accumulation of working capital ratio

As to movement
- Ratio of sales to receivables
- Finished goods turnover
- Raw materials turnover

Acid test ratio. Before the inventories can be used for the payment of current debts, the finished goods must be sold, and the goods in process and the raw materials must be converted into finished goods, and sold. Therefore, in analyzing the current position of a business, it is desirable to note the ratio between the quick current assets (cash and net receivables) and the current liabilities. This is called the *acid test* of the current position. A ratio of 1 to 1 is considered desirable.

	December 31,		Increase
	1949	1948	Decrease*
Quick assets—cash and net receivables . . .	$175,220.00	$112,400.00	$62,820.00
Current liabilities. .	111,120.00	137,010.00	25,890.00*
Dollars of quick assets per dollar of current liabilities..........	$1.58	$.82	$.76

In the computation of the acid test ratio it is proper to include among the quick assets not only the cash and receivables but also any temporary investments in marketable securities which presumably will be converted into cash to provide funds for current operating purposes.

Percentage distribution of current assets. It is obvious from the foregoing discussion of the acid test ratio that the current position of a company is not entirely dependent upon the ratio of total current assets to total current liabilities. The current position is also affected by the kinds of current assets owned. Any considerable shift from the relatively more current assets of cash and receivables to the relatively less current assets of inventories, or vice versa, may materially affect a company's ability to pay its current debts promptly.

Following is a percentage distribution statement of the current assets of Specialty Products Company on December 31, 1949 and 1948.

	December 31,			
	1949		1948	
	Amount	Per Cent of Total	Amount	Per Cent of Total
Cash..............................	$ 35,005.00	13.18%	$ 10,600.00	4.80%
Accounts Receivable—Less Reserve.......	109,105.00	41.08	82,450.00	37.33
Notes Receivable......................	31,110.00	11.71	19,350.00	8.76
Finished Goods.........	34,685.00	13.06	36,875.00	16.70
Goods in Process.......	24,160.00	9.10	27,515.00	12.46
Raw Materials...........	31,515.00	11.87	44,060.00	19.95
	$265,580.00	100.00%	$220,850.00	100.00%

Because of the shift from inventories to cash and receivables, the company seems to have been in a more liquid position at the end of 1949 than at the end of 1948 However, there possibly is another side to the picture The receivables may have increased because collections are slowing up, and the decrease in the inventories may not be desirable in view of the increase in sales, as shown in the comparative profit and loss statement on page 458

Accumulation of working capital ratio The ratios in the following statement were computed as follows

The ratios on the Cash line were computed by dividing the amount of cash by the amount of current liabilities

The ratios on the Accounts Receivable line were computed by dividing the total of the cash and the net accounts receivable by the amount of the current liabilities

And so forth

	Amounts December 31		Cumulative Ratios to Current Liabilities December 31	
	1949	1948	1949	1948
Current Assets				
Cash	$ 35 005 00	$ 10 600 00	32	08
Accounts Receivable—Net	109 105 00	82 450 00	1 30	68
Notes Receivable	31 110 00	19 350 00	1 58	82
Finished Goods	34 685 00	36 875 00	1 89	1 09
Goods in Process	24 160 00	27 515 00	2 11	1 29
Raw Materials	31 515 00	44 060 00	2 39	1 61
Total	$265 580 00	$220 850 00		
Current Liabilities	$111 120 00	$137 010 00		

This statement shows that, at the end of 1949, the cash and net accounts receivable were in excess of the current liabilities, at the end of 1948 it was necessary to include also the notes receivable and the finished goods inventory to obtain a total equal to the current liabilities

Ratio of sales to receivables Assume that a company sells $100,000 00 of merchandise during each of two years At the end of the first year, the receivables still uncollected amount to $10 000 00, at the end of the second year, the receivables amount to $25,000 00 The sales the first year are ten times the receivables at the end of the year, the sales the second year are only four times the receivables at the end of the year It is obvious that the collections are slowing up

On page 467 is a similar computation for the Specialty Products Company

	1949	1948
Net sales during the year	$963,605.00	$707,110.00
Notes and accounts receivable—end of year	140,215.00	101,800.00
Ratio of sales to receivables	6.87	6.95

The receivables appear to be slightly less current at the end of 1949 than at the end of 1948. (The gross receivables should be used in this computation if the information is available.)

Finished goods turnover. Is the finished goods inventory being converted into receivables as rapidly as it has been in the past?

	1949	1948
Cost of goods sold	$702,415.00	$551,300.00
Average inventory of finished goods:		
Inventory at beginning of year	$ 36,875.00	$ 31,410.00
Inventory at end of year	34,685.00	36,875.00
Total	$ 71,560.00	$ 68,285.00
Average inventory	$ 35,780.00	$ 34,142.50
Turnover (cost of sales ÷ average inventory)	19.63	16.15

This computation indicates that the finished goods inventory was turned more frequently in 1949 than in 1948.

Raw material turnover. Is the raw material inventory being converted into finished goods as rapidly as it has been in the past? The following computation indicates that the raw material inventory was turned more frequently in 1949 than it was in 1948.

	1949	1948
Raw materials used	$429,830.00	$316,530.00
Average inventory of raw materials:		
Inventory at beginning of year	$ 44,060.00	$ 28,615.00
Inventory at end of year	31,515.00	44,060.00
Total	$ 75,575.00	$ 72,675.00
Average inventory	$ 37,787.50	$ 36,337.50
Turnover (materials used ÷ average inventory)	11.37	8.71

Miscellaneous Ratios

Ratio of net worth to debt. The ratio of net worth to debt shows whether the proprietorship equity is increasing or decreasing in relation to the liabilities.

	December 31,	
	1949	1948
Total capital stock and surplus	$324,640.00	$262,025.00
Total liabilities	211,120.00	237,010.00
Ratio of net worth to debt	1.54	1.10

These ratios show an improvement in financial condition: the stockholders' interest in the business at the end of 1949 was 1.54 times the creditors' interest, whereas, at the end of 1948, it was only 1.10 times the creditors' interest.

Book value per share of stock In considering the stockholders interest in the business it will be interesting to note the change which has taken place in the book value per share of stock

	December 31	
	1949	1948
Capital stock	$250 000 00	$200 000 00
Earned surplus	74 640 00	62 025 00
Total net worth	$324 640 00	$262 025 00
Shares of stock outstanding	2 500	2 000
Book value per share	$129 86	$131 01

If common and preferred stocks are outstanding, book values must be computed for each class This means that the net worth must be divided into two parts the portion applicable to the preferred stock and the portion applicable to the common stock If the preferred stock is nonparticipating and there are no dividends in arrears, no portion of the surplus should be allocated to the preferred stock If the preferred stock is fully participating, the surplus must be apportioned ratably between the common and preferred stocks

Ratio of net worth to net fixed assets Many businesses have come to grief because of overinvestments in fixed assets which impose fixed charges upon the business The following computation shows that the ratio of net worth to net fixed assets is increasing

	December 31	
	1949	1948
Net worth	$324 640 00	$262 025 00
Fixed assets—net	270 180 00	278 185 00
Ratio of net worth to net fixed assets	1 20	94

Ratio of net sales to net fixed assets An increasing investment in fixed assets is particularly dangerous if the sales do not increase proportionately with increases in fixed assets Therefore, the ratio of net sales to net fixed assets should also be computed

	1949	1948
Net sales during the year	$963 605 00	$707 110 00
Fixed assets—net—at end of year	270 180 00	278 185 00
Ratio of net sales to net fixed assets	3 57	2 54

Ratio of net income to net sales The object of all business is to make a profit Therefore, it is important to know whether, out of each dollar of net sales, as much profit remains as heretofore This is determined by computing the ratio of net income to net sales

	1949	1948
Net income	$ 37 615 00	$ 12 050 00
Net sales	963 605 00	707 110 00
Ratio of net income to net sales	3 90%	1 70%

Ratio of net income to net worth. The rate of net income on sales may increase, but the sales may decrease so that the net income is a smaller per cent of the net worth than heretofore. Or the number of shares of stock outstanding may increase, so that the net income per share is less than before. Therefore, the following computation may be desirable:

	1949	1948
Net worth at beginning of the year:		
Capital stock (it is assumed that the additional stock was issued at the beginning of 1949)	$250,000.00	$200,000.00
Earned surplus...	62,025.00	59,975.00
Total...	$312,025.00	$259,975 00
Net income for the year	37,615 00	12,030.00
Ratio of net income to net worth	12.06%	4.64%
Net income per share	$15 05	$6 03

Summary. Other ratios may be computed, but those illustrated indicate the general method of using ratios in statement analysis.

The ratios illustrated may be assembled in an analytical summary in the following form. Increases indicate improvements.

	1949	1948
Is the working capital condition improving?		
Working capital ratio—dollars of current assets per dollar of current liabilities...	$2.39	$1.61
Acid test ratio—dollars of cash and net receivables per dollar of current liabilities	$1.58	$ .82
Are the current assets being converted as rapidly as heretofore?		
Receivables—ratio of sales to receivables.	6.87	6.95
Finished goods—turnover	19.63	16 15
Raw materials—turnover	11.37	8.71
Is the stockholders' interest in the business increasing?		
Ratio of net worth to debt	1.54	1.10
Book value per share of stock	$129.86	$131.01
Is there any tendency to overinvestment in plant?		
Ratio of net worth to net fixed assets....	1.20	.94
Ratio of net sales to net fixed assets	3.57	2.54
Are the earnings improving?		
Ratio of net income to net sales...	3.90%	1.70%
Ratio of net income to net worth...	12.06%	4.64%
Net income per share of stock....	$15.05	$6.03

Statement Analysis—Illustrative Case

Analysis of a single balance sheet. Below is a balance sheet which we shall assume was submitted to a bank's loaning officer in support of a request for a loan. For the time being we shall assume that it was the only statement submitted, and we shall see what information can be obtained from it.

A B COMPANY
Balance Sheet
December 31, 1949

Assets

Current Assets			
Cash		$ 15,000 00	
Accounts Receivable	$106,000 00		
Less Reserve for Bad Debts	3 000 00	103,000 00	
Inventories			
Finished Goods	$135,000 00		
Goods in Process	18,000 00		
Raw Materials	30,000 00	183,000 00	
Total Current Assets			$301,000 00
Fixed Assets			
Land		$ 15 000 00	
Buildings	$200 000 00		
Less Reserve for Depreciation	30 000 00	170,000 00	
Machinery and Equipment	$ 86,000 00		
Less Reserve for Depreciation	*12,000 00*	74 000 00	
Total Fixed Assets—Net			259,000 00
			$560 000 00

Liabilities and Net Worth

Current Liabilities		$100,000 00	
Fixed Liabilities			
Bonds Payable		75,000 00	
Total Liabilities			$175,000 00
Net Worth			
Capital Stock—$100 00 Par Value		$250,000 00	
Earned Surplus			
Balance, Beginning of Year	$119,000 00		
Surplus for the Year, Before Dividends	31,000 00		
Total	$150,000 00		
Less Dividends	15 000 00	135,000 00	
Total Net Worth			385,000 00
			$560 000 00

Working Capital Ratio

Current Assets		
Cash		$ 15,000 00
Accounts Receivable	$106 000 00	
Less Reserve for Bad Debts	*3,000 00*	*103,000 00*
Inventories		
Finished Goods	$135 000 00	
Goods in Process	18,000 00	
Raw Materials	30,000 00	183,000 00
Total		$301,000 00
Current Liabilities		100 000 00
Working Capital		$201 000 00
Working Capital Ratio		3 01 to 1

This ratio is considerably in excess of the rule-of-thumb 2 to 1 ratio.

Acid Test Ratio

Quick Current Assets	
Cash	$ 15,000 00
Accounts Receivable—Less Reserve	103,000 00
Total.	$118,000 00
Current Liabilities	$100,000 00
Acid Test Ratio	1.18 to 1

The acid test ratio more than meets the 1 to 1 requirement set up by some analysts.

Percentage Distribution of Current Assets

	Amount	Per Cent of Total
Cash	$ 15,000 00	4 98%
Accounts Receivable—Less Reserve	103,000 00	34 22
Finished Goods	135,000 00	44 85
Goods in Process	18,000 00	5 98
Raw Materials	30,000 00	9 97
Total... .	$301,000 00	100 00%

Accumulation of Working Capital Ratio

	Amount	Cumulative Ratio to Current Liabilities
Cash ..	$ 15,000 00	15
Accounts Receivable—Less Reserve	103,000 00	1 18
Finished Goods	135,000 00	2 53
Goods in Process. .	18,000 00	2 71
Raw Materials . .	30,000 00	3 01
Total	$301,000 00	

The percentage distribution of current assets and the accumulation of working capital ratio seem to indicate a satisfactory current condition.

Ratio of Net Worth to Debt

Net Worth:	
Capital Stock.. .	$250,000 00
Earned Surplus	135,000 00
Total	$385,000 00
Liabilities:	
Current... .	$100,000 00
Fixed.	75,000 00
Total	$175,000 00
Ratio of Net Worth to Debt	2 20 to 1

This ratio shows that there is a considerable capital to protect the liabilities.

Ratio of Net Worth to Net Fixed Assets

Net Worth	$385,000 00
Fixed Assets—Less Depreciation	
Land	$ 15,000 00
Buildings	170 000 00
Machinery and Equipment	74,000 00
Total	$259 000 00
Ratio of Net Worth to Net Fixed Assets	1 49 to 1

This ratio seems to indicate that the investments in fixed assets have not starved the company for working capital

The balance sheet shows "Surplus for the Year, Before Dividends —$31,000 00" Tentatively accepting this amount as the net earnings for the year, we can make the following computation:

Earning per Share of Stock—Tentative

Surplus for the Year, before Dividend	$ 31,000 00
Capital Stock	
Par Value	$250,000 00
Number of Shares	2 500
Earnings per Share	$12 40

Book Value per Share of Stock

Capital Stock	$250,000 00
Earned Surplus	135 000 00
Total	$385 000 00
Number of Shares of Stock	2,500
Book Value per Share	$154 00

Comparative balance sheet analysis. It is advisable to examine at least two balance sheets to see whether the condition is getting better or worse.

A comparative balance sheet of the *A B* Company is presented on page 473, and is subjected to analysis.

Working Capital Ratio

	December 31, 1949	December 31, 1948
Current Assets		
Cash	$ 15,000 00	$ 40,000 00
Accounts Receivable—Less Reserve	103,000 00	71,000 00
Finished Goods	135,000 00	110,000 00
Goods in Process	18,000 00	13,000 00
Raw Materials	30,000 00	25,000 00
Total	$301,000 00	$259,000 00
Current Liabilities	100,000 00	70 000 00
Working Capital	$201,000 00	$189 000 00
Working Capital Ratio	3 01	3 70

This statement shows that the amount of the working capital has increased but the ratio has materially decreased.

A B COMPANY
Comparative Balance Sheet
December 31, 1949 and 1948

	December 31, 1949	December 31, 1948	Increase Decrease*
Assets			
Current Assets:			
Cash	$ 15,000.00	$ 40,000.00	$ 25,000.00*
Accounts Receivable	$106,000.00	$ 74,000.00	$ 32,000.00
Less Reserve for Bad Debts	3,000.00	3,000.00	—
Accounts Receivable—Net	$103,000.00	$ 71,000.00	$ 32,000.00
Inventories:			
Finished Goods	$135,000.00	$110,000.00	$ 25,000.00
Goods in Process	18,000.00	13,000.00	5,000.00
Raw Materials	30,000.00	25,000.00	5,000.00
Total Inventories	$183,000.00	$148,000.00	$ 35,000.00
Total Current Assets	$301,000.00	$259,000.00	$ 42,000.00
Fixed Assets:			
Land	$ 15,000.00	$ 15,000.00	$ —
Buildings	$200,000.00	$135,000.00	$ 65,000.00
Less Reserve for Depreciation	30,000.00	20,000.00	10,000.00
Cost Less Depreciation	$170,000.00	$115,000.00	$ 55,000.00
Machinery and Equipment	$ 86,000.00	$ 65,000.00	$ 21,000.00
Less Reserve for Depreciation	12,000.00	10,000.00	2,000.00
Cost Less Depreciation	$ 74,000.00	$ 55,000.00	$ 19,000.00
Total Fixed Assets—Net	$259,000.00	$185,000.00	$ 74,000.00
	$560,000.00	$444,000.00	$116,000.00
Liabilities and Net Worth			
Current Liabilities:			
Accounts Payable	$100,000.00	$ 70,000.00	$ 30,000.00
Fixed Liabilities:			
Bonds Payable	$ 75,000.00	$ 55,000.00	$ 20,000.00
Net Worth:			
Capital Stock	$250,000.00	$200,000.00	$ 50,000.00
Earned Surplus:			
Balance at Beginning of Year	$119,000.00	$ 95,200.00	$ 23,800.00
Surplus for Year, before Dividends	31,000.00	35,800.00	4,800.00*
Total	$150,000.00	$131,000.00	$ 19,000.00
Less Dividends	15,000.00	12,000.00	3,000.00
Balance at End of Year	$135,000.00	$119,000.00	$ 16,000.00
Total Net Worth	$385,000.00	$319,000.00	$ 66,000.00
	$560,000.00	$444,000.00	$116,000.00

Acid Test Ratio

	December 31, 1949	December 31, 1948
Quick Current Assets		
Cash	$ 15,000 00	$ 40,000 00
Accounts Receivable—Less Reserve	103 000 00	71,000 00
Total	$118 000 00	$111,000 00
Current Liabilities	$100 000 00	$ 70 000 00
Acid Test Ratio	1 18	1 59

A comparison of the acid test ratios indicates that the company was in a considerably less liquid position at the end of 1949 than at the end of 1948—a fact which is further indicated by the two following computations.

Percentage Distribution of Current Assets

	December 31, 1949		December 31, 1948	
	Amount	Per Cent of Total	Amount	Per Cent of Total
Cash	$ 15,000 00	4 98%	$ 40 000 00	15 45%
Accounts Receivable—Less Reserve	103 000 00	34 22	71,000 00	27 41
Finished Goods	135,000 00	44 85	110,000 00	42 47
Goods in Process	18,000 00	5 98	13 000 00	5 02
Raw Materials	30,000 00	9 97	25 000 00	9 65
Total	$301 000 00	100 00%	$259,000 00	100 00%

Accumulation of Working Capital Ratio

	December 31, 1949		December 31, 1948	
	Amount	Cumulative Ratio	Amount	Cumulative Ratio
Cash	$ 15,000 00	15	$ 40,000 00	57
Accounts Receivable—Less Reserve	103,000 00	1 18	71,000 00	1 59
Finished Goods	135,000 00	2 53	110,000 00	3 16
Goods in Process	18,000 00	2 71	13,000 00	3 34
Raw Materials	30 000 00	3 01	25,000 00	3 70
Total	$301,000 00		$259,000 00	

Ratio of Net Worth to Debt

	December 31, 1949	December 31, 1948
Net Worth		
Capital Stock	$250,000 00	$200 000 00
Earned Surplus	135 000 00	119,000 00
Total	$385 000 00	$319,000 00
Liabilities		
Current	$100,000 00	$ 70,000 00
Fixed	75 000 00	55 000 00
Total	$175 000 00	$125,000 00
Ratio of Net Worth to Debt	2 20	2 55

A comparison of these ratios indicates that the ratio of net worth to debt decreased; that is, the capital cushion for the protection of the creditors was relatively smaller at the end of 1949 than at the end of 1948.

Ratio of Net Worth to Net Fixed Assets

	December 31,	
	1949	1948
Net Worth—as Above	$385,000.00	$319,000.00
Fixed Assets—Less Depreciation:		
Land	$ 15,000.00	$ 15,000.00
Buildings	170,000.00	115,000.00
Machinery	74,000.00	55,000.00
Total	$259,000.00	$185,000.00
Ratio of Net Worth to Net Fixed Assets	1.49	1.72

This computation shows that, although the net worth increased, the increase in the fixed assets caused a decrease in the ratio of net worth to fixed assets. This raises the question whether the increase in plant facilities was accompanied by a corresponding increase in business—a question which cannot be answered without access to operating statements.

Again tentatively accepting the amounts shown as Surplus for the Year Before Dividends in the comparative balance sheet as representing net earnings, we can make the following computation:

Earnings per Share of Stock—Tentative

	Year Ended December 31,	
	1949	1948
Surplus for the Year—Before Dividends	$31,000.00	$35,800.00
Number of Shares Outstanding at the End of the Year	2,500	2,000
Earnings per Share	$12.40	$17.90

Book Value per Share of Stock

	December 31,	
	1949	1948
Net Worth—as above	$385,000.00	$319,000.00
Number of Shares Outstanding at the End of the Year	2,500	2,000
Book Value per Share	$154.00	$159.50

Balance sheet and operating statement analyses. We shall now assume that the comparative profit and loss statement on page 476 is available, and shall see what an analysis of that statement will disclose.

Comparative Profit and Loss Statement
For the Years Ended December 31, 1949 and 1948

	Year		Increase	Ratio
	1949	1948	Decrease*	1949 to 1948
Gross Sales	$862,000 00	$828,000 00	$34 000 00	1 04
Returns	12 000 00	8 000 00	4,000 00	1 50
Net Sales	$850 000 00	$820,000 00	$30 000 00	1 04
Cost of Sales	595 000 00	557,600 00	37,400 00	1 07
Gross Profit	$255,000 00	$262,400 00	$ 7,400 00*	97
Selling Expenses	148 000 00	132,000 00	16,000 00	1 12
Net Profit on Sales	$107,000 00	$130 400 00	$23,400 00*	82
General Expense	96 000 00	94 600 00	1,400 00	1 01
Net Operating Profit	$ 11 000 00	$ 35,800 00	$24,800 00*	31
Profit on Securities	20 000 00	—	20,000 00	
Increase in Surplus, before Dividends	$ 31 000 00	$ 35,800 00	$ 4 800 00*	87

We have already seen that the gross book values of the fixed assets (see comparative balance sheet on page 473) have increased as follows.

	December 31,		Increase	
	1949	1948	Amount	Per Cent
Buildings	$200,000 00	$135,000 00	$65,000 00	48%
Machinery and Equipment	86,000 00	65,000 00	21,000 00	32

Let us now examine the comparative operating statement and see what operating trends the statement discloses, and what answers we can get to the question. Is the company benefiting or suffering from its plant expansion?

With a 48% increase in buildings and a 32% increase in machinery and equipment, the company's gross sales have increased only 4%. Obviously, the plant additions have not yet justified themselves by an increased volume of business

With a 4% increase in gross sales, there has been a 50% increase in returns, this suggests the possibility that the new plant is not producing satisfactory merchandise

The 4% increase in net sales has been accompanied by a 7% increase in the cost of goods sold Just what has caused this increase is, of course, not determinable from the data shown by the available statements.

Because the increase in the cost of goods sold is greater than the increase in the net sales, there is a decline in the gross profit on sales

The selling expenses have increased 12%. This suggests the possibility that sales promotion efforts and expenditures have been increased in an attempt to obtain orders for the additional merchandise which could be produced in the added plant. The fact that the

sales increased only 4% indicates that this additional sales effort was relatively unsatisfactory.

Finally, and of extreme significance, the fact is disclosed that the net operating profit decreased from $35,800.00 in 1948 to $11,000.00 in 1949, and that most of the 1949 profit was an extraneous profit on the sale of investment securities. This extraneous profit should be ignored when considering earning power.

Analysis of Manufacturing Costs

We shall now assume that we have obtained a statement showing the cost of goods manufactured and sold during the two years, and have abstracted from it the following data applicable to manufacturing costs:

	Year Ended December 31,		Ratio—1949 to 1948
	1949	1948	
Materials	$180,000.00	$172,000.00	1.05
Labor	225,000.00	213,000.00	1.06
Manufacturing Expenses	220,000 00	194,600.00	1.13
Total Cost of Finished Goods Manufactured	$625,000.00	$579,600.00	1.08

We now have the following facts, which appear very significant:

The investment in buildings increased 48%.
The investment in machinery and equipment increased 32%.
The sales increased 4%.
The cost of goods manufactured increased 8%.
Material costs increased 5%.
Labor costs increased 6%.
Manufacturing expenses increased 13%.

The increased investments in buildings, machinery, and equipment have not been accompanied by corresponding increases in sales or production.

It appears likely that the fixed charges resulting from the increases in fixed assets caused the 13% increase in manufacturing expenses. The manufacturing expenses were 91.4% of labor in 1948 and 97.8% in 1949. This increase in the overhead rate naturally increased the unit cost of the goods produced and decreased the gross profit.

The management probably hoped that the increased plant would permit increased production and that the company could make more sales and more profit. It seems possible that this hope has not been fulfilled, and that the result has been increased manufacturing costs and decreased profits.

Production and Inventories

The following data were summarized from the comparative statements on preceding pages.

	Year Ended December 31, 1949	1948	Per Cent Increase
Cost of Goods Manufactured	$625,000 00	$579,600 00	7 83%
Net Sales	850,000 00	820,000 00	3 66
Inventories—End of Year			
Finished Goods	135,000 00	110,000 00	22 73
Goods in Process	18,000 00	13,000 00	38 46
Raw Materials	30,000 00	25,000 00	20 00

This analysis seems to disclose a matter of major significance: an increase in the cost of goods manufactured out of proportion to the increase in sales, and a consequent increase in inventories. This immediately suggests the question Is the management (faced with increased manufacturing expenses because of increased plant) trying to keep down the unit manufacturing costs by increasing the quantity of production, but finding that the increased production cannot be sold, with the result that slow-moving inventories are piling up?

Let us measure the effect of these inventory increases on the turnovers.

	Year Ended December 31, 1949	1948
Finished Goods Turnovers		
Cost of Goods Sold	$595,000 00	$557,600 00
Finished Goods Inventories		
December 31, 1947		$ 90,000 00
December 31, 1948	$110,000 00	110,000 00
December 31, 1949	135,000 00	
Total	$245 000 00	$200 000 00
Average Inventories	$122,500 00	$100,000 00
Turnovers	4 86	5 58
Raw Materials Turnovers		
Materials Used	$180 000 00	$172 000 00
Raw Materials Inventories		
December 31, 1947		$ 20,000 00
December 31, 1948	$ 25,000 00	25,000 00
December 31, 1949	30 000 00	
Total	$ 55,000 00	$ 45 000 00
Average Inventories	$ 27,500 00	$ 22 500 00
Turnovers	6 55	7 64

The analysis of working capital on preceding pages disclosed a decrease in the working capital ratio and a decrease in the acid test ratio. Another weakening of the working capital now appears: The inventories are moving less rapidly.

Analysis of Receivables

Attention has already been directed to the 12% increase in selling expenses, and to the possibility that this increase resulted from a campaign to increase sales in order to dispose of the additional merchandise which could be produced by the added plant. The 4% increase in sales indicated that, if such a campaign was conducted, it was not very successful.

Another question now occurs to us: Has the company, in an effort to find a market for increased product, relaxed its credit requirements, with the result that goods have been sold to customers from whom it is more difficult to make collections? Some light may be thrown on this question by a computation of the receivable turnovers.

	Year Ended December 31,	
	1949	1948
Net Sales for the Year.	$850,000.00	$820,000.00
Accounts Receivable—End of Year	106,000.00	74,000.00
Ratio of Sales to Receivables	8.02	11.08

The ratios of net sales to receivables indicate that the receivables at the end of 1949 were less current than those at the end of 1948.

Summary. The principal features in the foregoing analysis are summarized below:

(1) During the year the company made extensive additions to fixed assets:

Buildings . . .	48%
Machinery .	32%

(2) These increases were accompanied by a 13% increase in manufacturing overhead.

(3) The increases in fixed assets and in manufacturing overhead were not accompanied by proportionate increases in the volume of sales. Therefore, it seems doubtful that the plant expansion was justified.

(4) The 13% increase in manufacturing overhead. spread over 5% more material and 6% more labor, increased the unit manufacturing costs.

(5) Consequently, there was a decrease in the rate of gross profit.

(6) Since the decrease in the rate of gross profit was not compensated by an increase in sales volume, there was a decrease in the amount of gross profit.

(7) The selling expenses increased $16,000.00, or 12%—evidently as the result of a promotional program to obtain markets

for the additional product However, the sales increased only 4%

(8) The net operating profit decreased from $35,800 00 in 1948 to $11,000 00 in 1949

(9) In an effort to keep the factory busy and reduce unit costs, it appears that goods have been manufactured in excess of requirements, with a resulting increase in inventories

(10) And in an effort to dispose of the inventories, it appears that sales have been made to poorer credit risks, with the result that there are more old accounts on the books than heretofore, and larger bad debt losses may be in prospect However, there has been no increase in the reserve for bad debts

(11) The working capital ratio has decreased from 3 70 to 3 01

(12) The working capital position has been weakened further by the less liquid distribution of current assets less cash and more receivables and inventories—particularly the latter

(13) The working capital position has been still further weakened because the current assets are being converted less rapidly than in the past

(14) This weakening of the current position is evidently making it more difficult for the company to pay its current debts, as indicated by the increase in current liabilities from $70,000 00 to $100,000 00—an increase of 43%

Limitations of statement analysis Comparative balance sheets, profit and loss statements, and statements of cost of goods manu factured and sold may not contain all the information required to reach a positive conclusion After analyses such as those in the preceding illustrative case have been made, it is advisable for anyone interested in the business to have a conference with the management to see whether any of the apparently unsatisfactory conditions or trends are subject to explanation

For example, the president of the *A B* Company might tell us

The plant additions were made in the latter part of 1949, and were in operation only during a part of December

The large returns in 1949 were the result of a sale of unsatisfactory merchandise to one customer The cause of the defect in the merchandise has been corrected

The 13% increase in manufacturing overhead, compared with the increases of 5% in material and 6% in labor, resulted from the fact that operations were charged with some expenditures during the construction period which could have been capitalized

During 1950 it will be possible to keep the plant sufficiently busy to cut down the unit overhead costs to about the 1948 level.

The management feels optimistic about being able to increase the sales materially, because there are already on hand numerous orders which resulted from the extensive (and expensive) sales campaign conducted toward the end of 1949, which caused the increase in selling expenses.

The increases in inventories and receivables are temporary. The receivables are large because of heavy sales made late in December, after the plant was in operation and goods were available. The inventories are high in anticipation of the filling of orders now held and expected to be received.

The unfavorable working capital condition and the profit record will be corrected, now that the plant is in full operation and orders can be filled.

On the other hand, management may be unable to make any explanations which minimize the significance of apparently unfavorable conditions or trends disclosed by statement analyses.

APPENDIX 1

Matters Related to Payrolls

Federal old age benefits taxes. The Social Security Act of 1935, as amended, provides for federal government disbursements called variously "old age benefits," "old age and survivors' benefits," "old age insurance," and "old age annuities" These payments include monthly benefits to workers who retire at age sixty-five, supplementary benefits to their wives and dependent children, benefits for survivors of wage earners who die, and lump sum payments in some cases

The funds required for these disbursements are obtained from taxes (generally called "O A B taxes") levied under the Federal Insurance Contributions Act on employers and employees, in amounts based on wage payments for services performed in the United States, Alaska, and Hawaii, and on American vessels The following services are excepted agricultural and casual labor, domestic services, family employment (such as the employment of a child under twenty-one by a parent) service on foreign vessels, services for the federal, state, and local governments and foreign governments and their instrumentalities, services for religious, charitable, and miscellaneous non profit organizations, services for rail carriers, services of student nurses and internes, services of fishermen, and services of persons under eighteen engaged in news paper distribution Payments made to an independent contractor for services performed are not wages

The taxes levied on employees are withheld by the employers from wage payments, these tax withholdings, as well as the taxes levied on the employers, are remitted by the employers to the Collector of Internal Revenue

The law originally provided that the initial rate of 1%, applicable to both the employer and the employee, should be increased ½ of 1% every three years to a maximum of 3% however, these increases were deferred, and the rates, at the time of this writing, are set at 1% through 1949, 1½% for 1950 and 1951, and 2% thereafter You should determine the rate currently in effect

The tax is not levied on wages in excess of $3,000 00 paid to a worker by one employer during a calendar year However, if an individual works for two or more employers during a calendar year, each employer is required to pay the tax on his wage payments

to the employee up to $3,000.00, and to make similar deductions from the employee's wages. The employee can obtain a refund from the government for deducted taxes on his aggregate wages for the year in excess of $3,000.00; the employers cannot obtain a refund.

Each employer must apply to the Social Security Administration for an "identification number," to be shown on his tax return. Each worker must apply to the Administration for an "account number"—often referred to as his *social security number;* the employer must be informed of the account number of each of his employees, for use in his records and reports.

The employer is required to report to each employee the amount of old age benefit tax deducted from his wages. This may be done by giving the employee a report covering one, two, three, or four quarters of a year, and showing the name of the employer, the period covered, the total amount of wages earned, and the amount of the tax deduction. Or the employer may make a similar report to the employee at the time of each wage payment. If employment is terminated, the employer must give a final statement to the employee on the date of the final wage payment. It is believed that most employers find it more convenient to report the tax deduction at the time of making each wage payment, rather than in reports for one or more quarters; methods of making such reports to employees are illustrated on pages 497 and 498.

The taxes assessed against the employer and his employees are payable by the employer quarterly (for the quarters ended March 31, June 30, September 30, and December 31); the returns should be filed with the Collector of Internal Revenue not later than the last day of the month following the period covered by the return. An illustration of the employer's tax return (Form SS–1a) is shown on page 484; if more than one sheet is required, continuation sheets are used.

It will be observed that the amounts of the employer's tax and the total employees' taxes may differ. This is because, in the computation of the taxes, fractional cents are ignored if they are less than half a cent; if more than a half cent, they are regarded as a cent.

The employer is required to maintain records which show, as to each employee, his name, address, and social security number; the total compensation due him at each pay date; any portion thereof not subject to tax; the period covered by the payment; and the amount of old age benefit insurance tax deducted. The employer must also keep copies of all returns and reports filed by him with government authorities.

Form SS-1a (Rev. Jan. 1937)
TREASURY DEPARTMENT

★ **EMPLOYER'S TAX RETURN** ★

UNDER FEDERAL INSURANCE CONTRIBUTIONS ACT

READ INSTRUCTIONS CAREFULLY

CASHIER'S STAMP

(Signature)

(Date) ___ 194

Collector of Internal Revenue

1 Number of employees listed in Schedule A. ________

2 Total taxable WAGES PAID $________

EMPLOYERS' TAX

3 1% of Item 2 $________

4 Credit or adjustment $________

5 Total employers' tax $________

EMPLOYEES' TAX

6 1% of Item 2 $________

7 Credit or adjustment $________

8 Total employees' tax $________

9 Total tax (total of Items 5 and 8) $________

Space Below for Collector's Use

Penalty $________

Interest $________

Total $________

DO NOT DETACH AT THIS LINE

SCHEDULE —EMPLOYER'S REPORT OF TAXABLE WAGES PAID TO EACH EMPLOYEE DURING THE QUARTER

attached ________

IF ANY EMPLOYEE'S ACCOUNT NUMBER IS UNKNOWN FOLLOW PAR. 11 OF INSTRUCTIONS

Employee's Account Number (17)			Name of Employee (18)	Taxable wages paid to Employee During Quarter (19)		
				Dollars	Cents	

TOTAL FOR THIS PAGE—Total taxable wages paid $________

21. TOTAL FOR THIS RETURN—Total taxable wages paid during quarter $________

Federal unemployment insurance taxes. Taxes are levied against employers (but not against employees) under the Federal Unemployment Tax Act to obtain funds required to meet the provisions of the Social Security Act relative to unemployment insurance, sometimes called *unemployment compensation.* Unemployment compensation payments are not made by the federal government directly to unemployed persons; the funds obtained by the collection of federal unemployment insurance taxes are used to make grants to the various states to assist them in carrying out their own unemployment compensation programs. Laws providing for unemployment compensation payments have been enacted by all the states and territories.

Unlike the federal old age benefit tax, which is assessed against an employer with one or more employees in covered employment, the federal unemployment insurance taxes are assessed against only certain employers, as defined in the law, as follows:

> "The term 'employer' does not include any person unless on each day of some twenty days during the taxable year, each day being in a different calendar week, the total number of individuals who were employed by him in employment for some portion of the day (whether or not at the same moment of time) was eight or more."

The expression "employed by him in employment" has the significance of *employed by him in covered employment*, or, in other words, not employed in the performance of exempt services. The services which are exempt, or excepted, for purposes of this act are almost identical with those mentioned on page 482 in the discussion of federal old age benefit taxes. A person is not subject to the federal unemployment insurance tax unless he has employed at least eight individuals for the performance of nonexempt services on at least one day during at least twenty different weeks of the taxable year; and an employer who is subject to the tax is assessed on the basis of wages paid to only those employees who are engaged in the performance of nonexempt services.

The federal unemployment insurance tax rate is 3%; wages in excess of $3,000.00 paid to any one individual during the taxable year are not subject to the tax. Although the tax rate is 3%, the employer is entitled to a credit for taxes paid to the states and territories under their unemployment compensation laws. This credit cannot be more than 90% of the tax assessed by the federal government at the 3% rate. Because of this provision in the federal law, the states have generally established a 2.7% unemployment compensation tax rate. Since taxable wages are generally (though subject to some minor exceptions) computed in the same manner for

both federal and state taxes, the tax rates are usually considered to be as follows

Federal tax	3%
State tax	2 7
Total	3 0%

Although the basic rate for state taxes is 2 7%, the tax actually payable to a state may be computed at a lower rate Since one of the purposes of state unemployment legislation is to stabilize employment, the state laws contain provisions for merit-rating plans, under these provisions, an employer who establishes a good record for stable employment (thus reducing the claims upon state funds for unemployment compensation) may obtain the benefit of a state tax rate much lower than 2 7% In order to assure the employer of the enjoyment of the tax saving resulting from the reduced state rate, the federal law provides that an employer paying a state tax at a rate less than 2 7%, as a result of the state's merit-rating plan, may deduct as a credit an amount computed at the 2 7% rate or at the highest rate applicable to any tax payer in the state, whichever is lower, the amount of the credit cannot, of course, be more than 90% of the federal tax

The employer must file his federal unemployment tax return with the Collector of Internal Revenue on or before January 31 following the taxable calendar year To assure himself of obtaining the credit for state taxes, these taxes should be paid not later than January 31

The federal tax return is made on Form 940, illustrated on page 487

There are two supporting schedules on the back of Form 940 Schedule *A* explains the deduction taken in Item 2 of Form 940 for nontaxable remuneration Schedule *B* shows the credit for state taxes paid, or the credit to which the employer is entitled if his state tax rate under the merit-rating plan is less than 2 7%, if taxes are paid to more than one state, the amount of the payment to each state should be shown on this schedule

The federal tax may be paid at the time the return is filed, or it may be paid in quarterly installments, on March 31, June 30, September 30, and December 31 of the year following that for which the tax is assessed

The employer's records should contain all information required to support his tax return

State unemployment compensation taxes Stimulated by the enactment of the federal unemployment insurance legislation, which provided for federal grants to the states as an aid in financing their

Form 940
TREASURY DEPARTMENT
INTERNAL REVENUE SERVICE

READ INSTRUCTIONS CAREFULLY

ANNUAL RETURN OF EXCISE TAX ON EMPLOYERS OF EIGHT OR MORE INDIVIDUALS

UNDER THE FEDERAL UNEMPLOYMENT TAX ACT

FOR CALENDAR YEAR 1947

FILE THIS RETURN WITH THE COLLECTOR OF INTERNAL REVENUE FOR YOUR DISTRICT NOT LATER THAN JANUARY 31, 1948

PRINT NAME AND ADDRESS

(Name of taxpayer)

(If individual or partnership, enter trade name, if used)

(Street and number, or rural route)

(Post office and postal zone number) (County) (State)

For use of Collector only
No.
Amount Paid, $
(Cashier's stamp)

Nature of business, in detail ______

Check (V) form of organization. [Corporation ☐] [Partnership ☐] [Individual ☐] [Other ☐ ______ (Specify, such as estate, trust, etc.)]

Date of organization ______ Was a return filed for 1946? ______ If not, attach explanation.

1. Total salaries, wages, and other remuneration PAID during 1947 for services of employees ______ $______
2. Less: Total nontaxable remuneration paid. (From Schedule A—Must be explained in Schedule A or in separate statement attached as a part hereof) ______ $______
3. Total taxable wages (item 1 minus item 2) ______ $______
4. Tax (3 percent of item 3) ______ $______
5. Less: Credit for contributions PAID into State funds, plus any additional credit as shown in Schedule B. Total credit limited to 90 percent of tax shown in item 4. ______ $______
6. Remainder of tax (item 4 minus item 5) ______ $______
7. Has a change of ownership, or other transfer, of the business taken place during the year? ______ (Yes or no) If "yes," each employer who has employed eight or more employees on a total of 20 or more calendar days during the calendar year, each such day being in a different calendar week, must file a separate return. Neither employer should report wages paid by the other employer.

For use of Auditor only

Space below for Collector's use

Penalty ______ $______

Interest ______ $______

Total ______ $______

I declare under the penalties of perjury that this return (including any accompanying schedules and statements) has been examined by me and to the best of my knowledge and belief is a true, correct, and complete return, and that no part of any payment made to a State unemployment fund which is claimed as a credit in item 5 above was or is to be deducted from the remuneration of employees.

(Signed) ______

(Title) ______ (Owner, President, or partner, member, etc.—See instructions)

(Date) ______, 194__

16—55429-1

unemployment compensation programs, all the states and territories have passed laws which have, in general, the following principal objectives.

(1) The payment of compensation, of limited amounts and for limited periods, to unemployed workers
(2) The operation of facilities to assist employers in obtaining employees and to assist workers in obtaining employment
(3) The encouragement of employers to stabilize employment, the inducement offered is a reduction in the tax rate, through the operation of merit-rating systems

Since the laws of the several states differ in many particulars, it is possible here to give only a general discussion. All the states levy a tax on employers a very few also levy a tax on employees The list of exempt services in the federal law is rather closely followed in most of the state laws Whereas the federal unemployment insurance tax is assessed against only those employers who have eight or more employees many of the states assess taxes on employers of a smaller number of individuals—even as few as one In most states the tax is not assessed on salaries in excess of \$3 000 00 In general, the state tax rate is basically 2 7% but provision is made in some of the laws for increased rates if they are essential to meet disbursement requirements All state laws include a merit-rating plan of some kind these plans are intended to effect lower taxes by a reduction of the tax rate or by a credit against taxes for employers who have established (during an experience period usually of three years) a favorable record of stable employment The reserve ratio plan is typical in principle it operates as follows

> Assume that an employer's average annual payroll for three years has been \$100 000 00
> Assume also, that the balance in the state's reserve account with this employer is \$9 000 00 this is the excess of the taxes paid by this employer over the amounts of benefits paid by the state to his former employees
> The reserve ratio (\$9 000 00 ÷ \$100 000 00) is 9%
> The higher the reserve ratio the lower the tax rate

Most states require employers to file returns quarterly and to pay the tax by the end of the month following the close of the quarter Since the amount of taxable wages paid to an individual is usually one of the factors determining the amounts of benefits payable to him when he is unemployed employers are required to file information returns showing the amount of compensation paid to each employee during the period.

The states require employers to maintain a compensation record

for each employee, showing, among other things, the period of employment, the reason for termination of employment, the cause of lost time, and the amounts of periodical payments of compensation to him during the period of employment. The specific requirements of each state are shown in its published regulations.

Federal income tax withholding. Employers of one or more employees are required to withhold federal income taxes from the wages of employees, except exempt wage payments, which are:

(a) For services performed as a member of the military or naval forces of the United States, other than pensions and retired pay includible in gross income,
(b) For agricultural labor,
(c) For domestic service in a private home, local college club, or local chapter of a college fraternity or sorority,
(d) For casual labor not in the course of the employer's trade or business,
(e) For services by a citizen or resident of the United States for a foreign government,
(f) For services performed by a nonresident alien (except that wages paid to residents of Canada and Mexico who commute to work in the United States are subject to tax withholding),
(g) For services for an employer performed by a citizen of the United States if it is reasonable to believe that: (1) during the entire calendar year the employee will be a bona fide resident of a foreign country; *or* (2) at least 80% of the wages paid by the employer will be for services in a U. S. possession.
(h) For services performed as a minister of the gospel, or
(i) As fees (but not salaries) to a public official.

The amount withheld from an employee's wages is affected by the amount of his income and the number of exemptions ($600.00 each).

An individual is entitled to:

(1) An exemption for himself.
(2) An additional exemption if he is over 65, or will become 65 on or before January 1 of the following year.
(3) An additional exemption if he is blind.

If the employee is married he can claim any of the above exemptions his spouse could claim if she were employed—unless, of course, she is employed and claims them herself.

(4) An exemption for each dependent. No *additional* exemptions are allowed for aged or blind *dependents*.

[illegible]

EMPLOYEE'S WITHHOLDING EXEMPTION CERTIFICATE

(Collection of Income Tax at Source on Wages)

Print full name ______________________ Social Security No. ______________

Print home address ______________________

FILE THIS FORM WITH YOUR EMPLOYER. Otherwise he is required by law to withhold tax from your wages without exemption.

HOW TO CLAIM YOUR WITHHOLDING EXEMPTIONS

I. If you are SINGLE, write the figure 1 ______

II. If you are MARRIED one exemption is allowed for the husband and one exemption for the wife.

(a) If you claim both of these exemptions, write the figure "2"
(b) If you claim one of these exemptions, write the figure "1"
(c) If you claim neither of these exemptions, write "0" ______

III. Additional exemptions for age and blindness

(a) If you or your wife will be 65 years of age or older at the end of the year and you claim this exemption, write the figure "1"; if both will be 65 or older and you claim both of these exemptions, write the figure "2" ______

(b) If you or your wife are blind, and you claim that exemption, write the figure "1". If both are blind, and you claim both of these exemptions, write the figure "2" ______

IV. If during the year you will provide more than one-half of the support of persons closely related to you, write the number of such dependents. (See instruction 3 on other side.) ______

V. Add the number of exemptions which you have claimed above and write the total ______

I CERTIFY that the number of withholding exemptions claimed on this certificate does not exceed the number to which I am entitled.

Dated ______________, 194__ (Signature) ______________

A dependent is a person who is closely related to the taxpayer, who has a gross income of less than $500 00 for the year, and who received more than half of his support for the year from the taxpayer

In order to determine the amount of tax which he should withhold from an employee s compensation, the employer must know the number of dependents claimed by the employee Therefore, the employee is required to furnish an Employee's Withholding Exemption Certificate (Form W–4) to his employer

If the employee's status as to exemptions changes during the year, he should give his employer an amended certificate, he is required to do so if the number of exemptions decreases, and he is permitted to do so if the number of exemptions increases.

Although, in this discussion of income tax withholdings, we are concerned primarily with the employer's payroll procedures, incidental mention is made of the fact that employees should inform themselves as to whether they are required, or it is to their advantage, to file returns at the end of the year

The employer's report and payment procedures are summarized below·

By the 10th of each month the employer should deposit in a depositary bank authorized by the Secretary of the Treasury the amount of tax withheld during the previous month if the amount thereof was $100 00 or more He should be given a depositary receipt by the bank.

On or before April 30, July 31, October 31, and January 31 of each year, the employer should file a quarterly report (Form W–1, *see page 491*) with the Collector of Internal Revenue and pay, either in cash or by submission of depositary receipts, the amount of taxes withheld during the previous quarter

Form W-1
(Rev. Sept. 1947)
U. S. TREASURY DEPARTMENT
Internal Revenue Service

UNITED STATES
QUARTERLY RETURN OF INCOME TAX WITHHELD ON WAGES
(File with Collector of Internal Revenue)

ORIGINAL

I declare, under the penalties of perjury, that this return has been examined by me and to the best of my knowledge and belief is a true, correct, and complete return, made in good faith, pursuant to the Internal Revenue Code and the regulations issued under authority thereof.

(Signed) ______

(Title) ______
(Owner, president, partner, member, etc.)

(Date) ______ 194__
(If paid by check or money order, make payable to Collector of Internal Revenue)

(Print in above space employer's name and address of principal place of business)

CASHIER'S STAMP
For use of Collector only

Date Quarter Ended

Master List No.

1. Total Income Tax withheld from wages during quarter . . . $______
2. Adjustment for preceding quarter(s) of calendar year . . $______
(Explain in statement attached)
3. Total tax withheld as adjusted . . . . $______

See Depositary Receipt Record on reverse of this sheet

Space Below for Collector's Use

4. Penalty . . . . . $______
5. Interest . . . . . $______
6. Total . . . . $______

Form W-2
U. S. Treasury Department
Internal Revenue Service

WITHHOLDING STATEMENT—1948
Wages Paid and Income Tax Withheld

ORIGINAL
Do Not Lose This Statement

EMPLOYEE TO WHOM PAID (First name, full address, and Soc. Sec. No.)

(To EMPLOYEE: Change name and address if not correctly shown)

Total wages (before pay-roll deductions) paid in 1948	Federal income tax withheld, if any
$______	$______

EMPLOYER BY WHOM PAID (Name, address, and S. S. identification No.)

To EMPLOYEE:
You may use the form on the back of this original Form W-2 as your income tax return *under certain conditions*. Before you use it, read the instructions on the back of the attached Employee's Copy.

DO NOT WRITE IN THIS SPACE—FOR COLLECTOR'S USE ONLY

Tax______ $______
Credits______ $______
Balance due or refund______ $______
Interest on refund______ $______
Total______ $______

Form W-3
U. S. Treasury Department
Internal Revenue Service

Reconciliation of Quarterly Returns of Income Tax Withheld on Wages (Forms W-1) with Income Tax Withholding Statements (Forms W-2a)

ORIGINAL
1948

1. Total number of copies of employee's statements (Forms W-2a) transmitted herewith______

2. Total income tax withheld on wages during 1948 as shown by copies of employee's statements for income tax withheld on wages (Forms W-2a) $______(A)

3. Total income tax withheld on wages during 1948 as shown on Line 3 of employer's Return of Income Tax Withheld on Wages (Forms W-1)—

Quarter ended March 31______ $______
Quarter ended June 30______ ______
Quarter ended September 30______ ______
Quarter ended December 31______ ______
TOTAL______ $______(B)

(Type or print in above space employer's name and address of principal place of business)

District and Master List No.
(To be filled in by Collector)

NOTE
Any discrepancy between the amounts shown on Lines (A) and (B) must be fully explained in an attached statement. (See instructions on reverse of duplicate.)

On or before January 31 the employer should give each of his employees a withholding receipt (Form W-2, see page 491) showing the employee's total wages for the preceding year and the amount of tax withheld therefrom If an employee's employment is terminated, the employer should give him, at the time of the last wage payment, a withholding receipt covering the portion of the year during which he was employed

On or before January 31 the employer should file with the Collector of Internal Revenue a Reconciliation of Quarterly Returns (Form W-3), which summarizes the amounts of taxes shown by the quarterly returns Form W-3 should be accompanied by carbon copies of all forms W-2 given to employees, and by a listing (which may be in the form of an adding machine tape) of the amounts of withheld taxes as shown by the W-2 forms, the total of this listing should agree with the total for the year as shown by Form W-3

Other payroll deductions. Employers may make other deductions from payrolls, such as the following deductions for premiums for group hospital insurance, deductions for purchases of government bonds for the employees, and deductions for payment of union dues

Requirements of Federal Fair Labor Standards Act. This act establishes a minimum hourly wage rate and maximum hours of work per week for certain classes of employees of concerns engaged directly or indirectly in interstate commerce, and provides that payment for overtime hours in excess of 40 hours during any work week shall be at the rate of 1½ times the regular hourly wage The act also requires that employers subject to it shall maintain a record for each subject employee showing his name, address, date of birth (if under 19), occupation, work week, regular rate of pay per hour, basis of wage payment (hour, week, month, piecework, and so on), hours worked per day and per work week, daily or weekly wages at his regular rate, weekly wages at overtime rate, miscellaneous additions to or deductions from wages, total periodical wage payments, and date of payment

Following are some illustrations of the application of the requirement for the payment of wages at 1½ times the regular hourly rate for hours of work in excess of 40 during any work week

(1) *A*'s regular hourly rate is $1 00 He works 45 hours during one week His wages are computed as follows

45 hours at $1 00	$45 00
5 hours at 50	2 50
Total	$47 50

(2) *B*'s wages are \$58.50 a week for a regular work week of 39 hours (7 hours a day for 5 days, and 4 hours on Saturday). He works 45 hours during one week.

\$58.50 ÷ 39 =	\$1.50	regular hourly rate.
45 hours at \$1.50 =	\$67.50	
5 hours at .75 =	3.75	(Excess payment for hours over 40)
Total	\$71.25	

(3) *C* accepts a position with the understanding that he is to work 7 hours per day during each of the 6 days of his work week, and is to receive a weekly wage of \$86.00. He works 50 hours during one week. To determine his regular hourly rate we must remember that his regular work week consists of 42 hours, and that for 2 of these hours he is being paid 1½ times the regular hourly rate; in other words, for the 2 hours regularly worked in addition to 40 hours, he is given the equivalent of 3 hours' pay. Therefore,

\$86.00 ÷ 43 = \$2.00, the regular hourly rate.

If he works the regular 42 hours, his wage is (theoretically) computed as follows:

42 hours at \$2.00 =	\$84.00	
2 hours at 1.00 =	2.00	(Excess for hours over 40)
Total	\$86.00	

For the week that he works 50 hours, his wage is:

50 hours at \$2.00 =	\$100.00	
10 hours at 1.00 =	10.00	(Excess for hours over 40)
Total	\$110.00	

If wages are paid monthly or semimonthly, recognition must be given to the fact that the time-and-one-half requirement applies to each work week separately. To illustrate, assume that an employee, whose regular hourly rate is \$1.00, was paid for the half-month ended Wednesday, July 15, and that he was entitled to no overtime payment for that period. We are now to compute his wage payment for the last half of July; we require the following information as to hours worked:

In prior payroll period:

Monday,	July	13	8
Tuesday,	"	14	8
Wednesday,	"	15	8

In current payroll period:

Thursday,	July 16	8
Friday,	" 17	7
Saturday,	" 18	5
Monday,	" 20	6
Tuesday,	" 21	7
Wednesday,	" 22	7
Thursday,	" 23	8
Friday,	" 24	6
Saturday,	" 25	7
Monday,	" 27	8
Tuesday,	" 28	8
Wednesday,	" 29	8
Thursday,	" 30	8
Friday,	" 31	8

His total wage payment for the semimonthly period is computed as follows.

(a) For the portion of the work week ended July 18:
Considering that work week as a whole, he worked 44 hours. Since, at the time of making the payment for the period ended July 15, it was not known whether he would work over 40 hours during the entire week, he was paid for the first 3 days at the regular rate. We now find that he worked 44 hours during that week, 20 of them during the current payroll period. Therefore, the payment to him now should be:

20 hours at $1 00 =	$20 00
4 hours at .50	2 00
Total	$22 00

(b) For the work week ended July 25:
During this week he worked 41 hours. For it he should be paid:

41 hours at $1 00 =	$41 00
1 hour at 50	50
Total	$41 50

(c) For the portion of the work week ended July 31:
Although he had already worked 40 hours during the week, there was no certainty on Friday night that he would work on Saturday. Therefore, he should be paid:

40 hours at $1 00 = $40 00

PAYROLL SUMMARY

For the Week Ended *August 7, 1948* Date of Payment *August 9, 1948*

Employee No.	Income Tax Exemptions	Name	Day of Month 1	2	3	4	5	6	7	Total Hours	Hours Over 40	Hourly Wage Rates: Regular	Hourly Wage Rates: Excess	Wages: Regular	Wages: Excess	Wages: Total	Deductions: O.A.B.	Deductions: Income Tax	Deductions: Hospital Insurance	Deductions	Net	Check No.
			Hours Worked																			
35	*1*	*John Jones*	*7*	*8*	*0*	*8*	*7*	*7*		*43*	*3*	*1.95*	*.975*	*83.85*	*2.93*	*86.78*	*.87*	*11.10*			*74.81*	*5216*
30	*3*	*Frank Brown*	*7*	*7*	*7*	*7*	*7*	*7*		*42*	*2*	*2.15*	*1.075*	*90.30*	*2.15*	*92.45*	*.92*	*8.10*			*83.43*	*5217*
														3,128.40	*130.80*	*3,265.20*	*30.59*	*381.80*			*2,852.81*	

His total wage payment for the semimonthly period is the total of the items shown below

For partial work week ended July 18	$ 22 00
For work week ended July 25	41 50
For partial work week ended July 31	40 00
Total	$103 50

Payroll procedures The payroll summary on page 495 furnishes information required for the entries in the ledger accounts applicable to wages and payroll deductions Postings of column totals may be made directly from the payroll summary to the ledger, the debits and credits are shown below

Wages (if it is desired to debit various accounts for amounts of wages payable for different services an analysis must be made to obtain the information for this purpose)	3 265 20	
Federal O A B Taxes Withheld from Employees		30 59
Federal Income Taxes Withheld from Employees		381 80
Wages Payable		2 852 81

Some companies consider it satisfactory to use one account, "Federal Taxes Withheld from Employees," for both the O A B and the income tax withholdings If this is done, the entries in the account should be identified, so that the liability on each class of tax can be determined

It will be observed that the amount shown in the payroll summary for O A B withholdings is not exactly 1% of the payroll this is presumably because some of the wage payments represented excesses over $3 000 00, which therefore were not subject to the social security taxes

The employer should compute his own liability for social security taxes as follows

Total wages	$3 265 20
Wages not subject to social security taxes	208 10
Wages subject to taxes	$3 057 10
Taxes	
O A B—1%	$ 30 57
Federal unemployment—3%	9 17
State unemployment (say 2 7%)	82 54
	$ 122 28

The entry to record the expense and the liabilities for these taxes may be as follows

Taxes (separate expense accounts may be used if desired)	122 28	
O A B Taxes Payable		30 57
Federal Unemployment Taxes Payable		9 17
State Unemployment Taxes Payable		82 54

INDIVIDUAL EMPLOYMENT AND COMPENSATION RECORD

Date Employed *8-1-48* Name *John Jones* Employee No. *35*

Date of Severance ______ Address *2913 So. Burns Ave.,* Social Security Acct. No. *325-10-0876*

Cause ______ *Chicago* Date of Birth *8-17-23*

______ Phone *Bal. 2761*

For Week In 1948 Ended		Income Tax Exemptions	Lost Time		Hours Worked		Regular Hourly Rate	Total Wages	Deductions					Net	Check No.
			Hours	Cause	Total	Overtime			O.A.B.	Income Tax	Hospital Insurance				
Aug.	*7*	*1*	*1*	*V*	*43*	*3*	*1.95*	*80.78*	*.87*	*11.10*				*75.81*	*5216*
	14				*42*	*2*		*83.85*	*.84*	*10.50*				*72.51*	*5273*

V—Voluntary time off.

PAYROLL CHECK

DETACH BEFORE CASHING CHECK
STATEMENT OF EARNINGS AND DEDUCTIONS FOR EMPLOYEE'S RECORD COVERING PAY PERIOD TO AND INCLUDING DATE SHOWN BELOW

BAUMANN, FINNEY & CO.
208 S. LA SALLE ST.
CHICAGO, ILL.

DATE ______ 194__

TO ______

TOTAL WAGES		
OLD AGE BENEFIT		
WITHHOLDING U S INCOME TAX		
U S WAR BONUS		
INSURANCE		
TOTAL DEDUCTIONS		
AMOUNT THIS CHECK		

BAUMANN, FINNEY & CO.
ACCOUNTANTS AND AUDITORS
208 SOUTH LA SALLE STREET

No. A 210

CHICAGO 4, ______ 194__

PAY TO THE ORDER OF ______ $ ______

PAY ROLL

______ DOLLARS

BAUMANN, FINNEY & CO.

CITY NATIONAL BANK
2-11 AND TRUST COMPANY 2-11
OF CHICAGO

BY ______

To meet the requirements of the social security legislation, it is also desirable to keep, for each employee, an individual employment and compensation record, similar to that illustrated on page 497.

To comply with legal requirements, payroll records with supporting data should be retained for four years.

Wage payment reports to employees. As previously stated, most employers consider it preferable to make the reports to employees of payroll deductions, required by the law, at the time of each wage payment rather than at periodical intervals. Two customary forms are illustrated.

If wages are paid by check, a stub may be attached to the check and the data may be shown on the stub. Such a check is illustrated on page 497.

If wages are paid in cash, the pay envelope may be printed as in the following illustration:

THE BROWN COMPANY

Employee's name ________

Employee's number ________

Date paid ________ 19___

	Hours	Wages
Regular	____	____
Overtime	____	____
Total	____	____
Deductions:		
O A B. tax	____	
U. S. Inc. tax	____	
War bonds	____	
Insurance	____	
____	____	
____	____	
Total deductions		____
Cash enclosed		____

APPENDIX 2

Locating Errors

It is impracticable to attempt to state a procedure which can invariably be followed, step by step, in locating errors in the general ledger or in the subsidiary records. Experience is the best guide, but the following suggestions may be helpful.

Checking the general ledger. It is usually advisable to locate any errors in the general ledger before looking for errors in the subsidiary records. Until the general ledger is in balance, there can be no assurance that the controlling accounts are correct. Suppose, for instance, that the general ledger is out of balance and that the accounts receivable ledger is not in agreement with its control; it may be that the Accounts Receivable controlling account is incorrect and that, after the error in that account has been located, the subsidiary ledger and the controlling account will be in agreement.

If the general ledger is out of balance, the following procedure may be followed by the bookkeeper:

(1) Refoot the general ledger trial balance.

(2) See that the ledger balances have been correctly transcribed to the trial balance, watching for errors in amounts, for debit balances entered on the credit side of the trial balance or vice versa, and for ledger balances omitted from the trial balance.

(3) Recompute the ledger balances and refoot the debit and credit sides of the accounts.

(4) Check the postings from the books of original entry to the ledger, watching for errors in amounts and for postings to the wrong side of an account. As mentioned in Chapter 10, entries affecting controlling accounts are sometimes made in books of original entry which do not contain special columns for the controlling accounts affected; the amounts are entered in the General Ledger column and are posted twice: to the controlling account and to the subsidiary ledger. In checking the postings, give special attention to such items to be sure that they have been properly posted.

As each item in a book of original entry is traced to the ledger, place a check mark beside the amount in the book of original entry and also beside the amount in the ledger. After this work has been completed, look for unchecked

items in the books of original entry (indicating items which have not been posted), and for unchecked items in the ledger (indicating entries which have been posted twice, or which, for some other reason, do not belong in the ledger)

(5) Refoot the books of original entry If a book contains debit and credit columns (as in the voucher register, which contains a Vouchers Payable and a General Ledger credit column and numerous debit columns) cross-foot the column totals to see that the sum of the debit column totals is equal to the sum of the credit column totals

Posting to work sheets If the procedure described above does not result in locating the error, it may be necessary to post all the entries to work sheets Using sheets as large as can easily be handled, head up skeleton accounts, thus

Cash	Accounts Receivable	Notes Receivable

Provide skeleton accounts for all the accounts in the ledger, putting as many accounts as possible on one page, and allowing only as much space as is necessary in each account Copy into the skeleton accounts all the ledger balances at the beginning of the period, take a trial balance of the skeleton accounts, thus proving that the accounts were in balance at the beginning of the month or the year Post all the entries from the books of original entry, entering only the reference to the book of original entry and the amount, thus

Accounts Receivable

Bal.		10 000	RS		1 000
S		30 000	CR		27 000
			J		1 500

After completing the posting to the work sheets, compute the balance of each work sheet account and compare it with the balance of the corresponding ledger account If the balance of a work sheet account does not agree with the balance of the corresponding ledger account, compare the entries in the ledger account with the entries in the work sheet account

This procedure is called *abstracting the books of original entry*, and will often locate an error after all other methods have failed

Checking the subsidiary ledgers. After the general ledger has been balanced, if a subsidiary ledger does not agree with its control:

(1) It may be tentatively assumed that the general ledger is correct and that the error lies in the subsidiary ledger.

(a) Refoot the schedule of the subsidiary ledger.

(b) See that the balances of the subsidiary ledger accounts have been correctly transcribed from the ledger to the schedule, watching for errors in amounts and for balances omitted from the schedule. In some cases, subsidiary ledgers which normally contain only debit balances (as the accounts receivable ledger) have a few credit balances, and ledgers which normally contain only credit balances (as the accounts payable ledger) have a few debit balances: such exceptional balances should be watched for.

(c) Recompute the ledger balances and refoot the two sides of the accounts.

(d) Trace all postings from the books of original entry to the subsidiary ledgers, place check marks beside the entries in the books of original entry and the accounts, and look for unchecked items.

(2) The assumption that the error is in the subsidiary ledger may be incorrect. Suppose, for instance, that a sales book appears as follows:

Sales Book

Date		Name	√	Amount
19—				
July	3	John Smith	√	500 00
	15	William Brown	√	600 00
	29	Fred White	√	300 00
				1,500 00
				10√ (501)

This sales book has been incorrectly footed: the total should be $1,400.00 instead of $1,500.00. The error in footing resulted in an excess debit to Accounts Receivable control and a similar excess credit to Sales, and left the general ledger in balance—but incorrect. The subsidiary accounts receivable ledger will not agree with its control: but the error is in the general ledger, notwithstanding the fact that the general ledger is in balance.

Because of such possibilities, all posted column totals should be verified by refooting.

Checking other subsidiary records The voucher register is a subsidiary record, but postings are not made to it as they are to a subsidiary accounts receivable or accounts payable ledger The open or unpaid items consist of those entries which have no notations in the Date Paid column If the schedule of open items in the voucher register does not agree with the balance of the Vouchers Payable account

(1) Refoot the Vouchers Payable column to see that the total posted to the controlling account is correct
(2) See whether there are any debits to Vouchers Payable in the Sundry Accounts column, recording cancellations of vouchers on account of partial payments or other adjustments if any such debits to Vouchers Payable are found, see that they have been correctly posted
(3) The cash disbursements book shows the numbers of all paid vouchers, working from the cash disbursements book, see that notations have been made in the Date Paid column for all paid vouchers
(4) Vouchers are sometimes canceled by the issuance of notes, with entries in the journal debiting Vouchers Payable and crediting Notes Payable in such cases notations should be made in the Date Paid column of the voucher register See that all such notations have been made

The note registers may be subsidiary records if so, the open items should agree with the balances in the Notes Receivable and Notes Payable accounts If the notes receivable register is out of agreement with the controlling account

(1) See that there is an entry in the register for each note received and recorded in the journal (notes received on account) or in the cash disbursements book or voucher register (notes received for money loaned)
(2) See that a notation in the Date Paid column of the register has been made for each note collected (recorded in the cash receipts book) or otherwise canceled (recorded in the journal or elsewhere)

If the notes payable register is out of agreement with its control, a similar procedure may be followed

Expense ledgers or analysis records are also subsidiary records If they do not agree with their controls

(1) Refoot the summaries prepared at the end of the month, or recompute the balances of the accounts (if accounts are kept)

(2) Check all postings from the voucher register (or from the vouchers, if postings are made from the vouchers) and watch particularly for charges or credits to expense controls from other books, seeing that entries have also been made in the subsidiary records. For instance, depreciation charges will be recorded in the journal, expense adjustments may also be made in the journal, and refunds credited to expense may be recorded in the cash receipts book.

Special tests. Certain special tests may be applied in locating errors in the general ledger or in finding differences between the subsidiary ledgers and the controls. These tests, which are illustrated below, may be applied before beginning the routine already described.

(1) Determine the exact difference to be located: for instance, assume that the debit total of the general ledger trial balance is \$50,200.00 and that the credit total is \$50,000.00; the difference is \$200.00—too little credit or too much debit.

   (a) Look for a credit balance of \$200.00 in the ledger: it may have been omitted from the trial balance.
   (b) Look for a \$200.00 error in transcribing the balances from the ledger accounts: for instance, a debit balance of \$2,000.00 entered in the trial balance as \$2,200.00, or a credit balance of \$2,200.00 entered in the trial balance as \$2,000.00.
   (c) Look for an entry of \$200.00 in the books of original entry; if it is a credit, it may not have been posted: if it is a debit, it may have been posted twice.

(2) Treating a debit as a credit (or vice versa) either in posting or in transferring balances to the trial balance will produce a trial balance difference of twice the amount of the item incorrectly treated. Therefore, divide the trial balance difference by two: in the foregoing illustration the quotient will be \$100.00. Since we have too much debit (or too little credit):

   (a) Look for a credit balance of \$100.00 in the ledger and see whether it may have been entered on the debit side of the trial balance.
   (b) Look for a credit entry of \$100.00 in the books of original entry and see if it may have been posted to the debit side of the ledger.

(3) Transpositions of figures (for instance, \$78 50 posted as \$75 80) are errors frequently and easily made, they should be constantly guarded against and may be sought for if the books are out of balance A transposition of two figures will produce an error of an amount exactly divisible by nine, if the transposed figures are in adjacent decimal positions, the significant figure of the quotient after dividing by nine will be the difference between the figures transposed, and the decimal position of this significant figure will be that of the right of the two numbers transposed

As an illustration

An entry of	\$78 50
Posted as	75 80
Will cause an error of	\$ 2 70
Dividing this difference by 9 will produce a quotient of	30

Since the difference (\$2 70) is exactly divisible by 9 a transposition is indicated the difference between the figures transposed appears to be 3 and these figures appear to be in the dimes column and the column at its left Hence we may look for items (ledger balances or entries) where the difference between the two figures in the dimes and dollars places is 3 as in the number \$78 50

As another illustration

An entry of	\$613 50
Posted as	163 50
Will produce a difference of	\$450 00
The quotient after dividing by 9 is	50 00

Suggesting a transposition (in the tens and hundreds columns) of two figures with a difference of 5

These special tests for transpositions are sometimes helpful in locating errors, but the other methods described are more likely to be effective

Correcting errors. Erasures in accounting books should be avoided, since they tend to discredit the records Corrections should be made by drawing a line through the incorrect entry and making the correct entry above it, or by a journal entry, thus

Machinery and Equipment	500 00	
Buildings		500 00

To correct improper posting of voucher register entry of June 15 Debit was posted to Buildings account should have been posted to Machinery and Equipment

APPENDIX 3

Preparation of Monthly Statements When Books Are Closed Annually

On pages 506 and 507 are working papers prepared at the end of January. The books of the company were closed on the preceding December 31. They were not closed on January 31. Therefore, on February 28,

The Inventory account balance shows the amount of the inventory on December 31.
The Surplus account balance shows the balance on December 31.
The balances of the income and expense accounts show results of operations for the two months ended February 28.
The asset and liability account balances show assets (other than inventory) and liabilities at the end of February.

If it is desired to prepare statements for the two months ended February 28, the working papers can be prepared in the manner with which you are already familiar.

However, if it is desired to prepare operating statements for February, the account balances will not show operating results for that month, and it will be necessary to deduct January 31 balances of operating accounts from February 28 balances to determine the changes in the account balances during February. Refer to the working papers on pages 508 and 509 and observe the following:

The trial balances after adjustment, on January 31 and February 28, are entered in the first two pairs of columns.
The balances in the income and expense accounts (beginning with Sales and ending with Federal Income Tax) on January 31 are deducted from the balances on February 28, and the differences (resulting from February transactions) are extended to the February Profit and Loss columns.
The inventory on December 31 is not extended to any column.
The inventory at the end of January (which was shown in the January working papers) is entered in the Profit and Loss debit column: and the inventory at the end of February is entered in the Profit and Loss credit and the Balance Sheet debit columns.
The balance in the Profit and Loss columns then shows the net income for February. This is entered as a balancing

THE BAILEY COMPANY

Working Papers

For the Month of January, 19—

	Trial Balance January 31, 19— After Adjustments		Profit and Loss		Surplus		Balance Sheet	
Cash	3,417 00						3,417 00	
Accounts Receivable	8,956 00						8,956 00	
Reserve for Bad Debts		460 00						460 00
Notes Receivable	3,000 00						3,000 00	
Accrued Interest Receivable	21 00						21 00	
Inventory (December 31, 19—)	23 650 00		23,650 00					
Land	10,000 00						10,000 00	
Buildings	25,000 00						25,000 00	
Reserve for Depreciation—Buildings		3,083 00						3,083 00
Furniture and Fixtures	6,000 00						6,000 00	
Reserve for Depreciation—Fur. & Fix		1,050 00						1,050 00
Unexpired Insurance	180 00						180 00	
Accounts Payable		5,860 00						5,860 00
Notes Payable		6,000 00						6,000 00
Accrued Interest Payable		18 00						18 00
Reserve for Federal Income Tax		800 00						800 00
Capital Stock		50,000 00						50,000 00
Surplus (December 31, 19—)		10,308 00				10,308 00		

Sales		11,975.00		11,975.00				
Returned Sales and Allowances	212.00		212.00					
Purchases	6,730.00		6,730.00					
Returned Purchases and Allowances		115.00		115.00				
Freight In	196.00		196 00					
Selling Expense (Control)	862.00		862.00					
General Expense (Control)	493.00		493.00					
Discount on Purchases		58.00		58.00				
Interest Income		15 00		15.00				
Discount on Sales	207.00		207.00					
Interest Expense	18.00		18.00					
Federal Income Tax	800.00		800.00					
	89,742.00	89,712.00						
Inventory, January 31, 19—				22,615.00			22,615.00	
Net Income for January			1,610 00			1,610.00		
			31,778.00	34,778.00				
Surplus, January 31, 19—					11,918.00			11,918.00
					11,918.00	11,918.00	79,189.00	79,189.00

THE BAILEY COMPANY
Working Papers
For the Month of February, 19—

	Adjusted Trial Balances				Profit and Loss February		Surplus		Balance Sheet	
	January 31, 19—		February 28, 19—							
Cash	3,417 00		5,095 00						5 095 00	
Accounts Receivable	8,950 00		9,329 00						9 329 00	
Reserve for Bad Debts		400 00		525 00						525 00
Notes Receivable	3 000 00		3 000 00						3,000 00	
Accrued Interest Receivable	21 00		30 00						30 00	
Inventory (December 31, 19—)	23,650 00		23 650 00							
Land	10,000 00		10 000 00						10,000 00	
Buildings	25,000 00		25,000 00						25,000 00	
Reserve for Depreciation—Buildings		3,083 00		3,100 00						3,100 00
Furniture and Fixtures	6,000 00		6 000 00						6,000 00	
Reserve for Depreciation—Fur. & Fix.		1,050 00		1,100 00						1,100 00
Unexpired Insurance	180 00		165 00						165 00	
Accounts Payable		5,860 00		5 320 00						5,320 00
Notes Payable		6 000 00		6 000 00						6 000 00
Accrued Interest Payable		18 00		40 00						40 00
Reserve for Federal Income Tax		800 00		1,520 00						1,520 00
Capital Stock		50,000 00		50,000 00						50,000 00
Surplus (December 31, 19—)		10,308 00		10,308 00				10,308 00		
Sales		11,975 00		21,810 00		9,835 00				
Returned Sales and Allowances	212 00		387 00		175 00					
Purchases	6 730 00		12,570 00		5 840 00					
Returned Purchases and Allowances		115 00		207 00		92 00				

Freight In	196 00		307 00		111 00					
Selling Expense (Control).	882 00		1,709 00		817 00					
General Expense (Control)	193 00		663 00		170 00					
Discount on Purchases		58 00		100 00		51 00				
Interest Income		15 00		30 00		15 00				
Discount on Sales	207 00		391 00		187 00					
Interest Expense	18 00		16 00		28 00					
Federal Income Tax	800 00		1,520 00		720 00					
	80,712 00	80,712 00	100,171 00	100,171 00						
Inventories:										
January 31					22,615 00					
February 28						22,100 00			22,100 00	
Net Income for February					1,130 00			1,130 00		
					32,123 00	32,123 00				
Net Income for January								1,610 00		
Surplus, February 28, 19—							13,318 00			13,318 00
							13,318 00	13,318 00	81,025 00	81,025 00

figure in the Profit and Loss debit column and is extended to the Surplus credit column

The balance of the Surplus account as of December 31 is entered in the Surplus credit column The net income for January, shown by the working papers for that month, is also entered in the Surplus credit column The balance of the Surplus columns then shows the surplus at the end of February, the amount is entered in the Surplus debit column as a balancing figure, and is extended to the Balance Sheet credit column

The February 28 balances in the asset, liability, and capital stock accounts are extended to the Balance Sheet columns, and these columns are footed

The statements for January and February are not shown, they would be prepared from the working papers in the usual manner

ASSIGNMENT MATERIAL

Ruled forms especially adapted to the solutions of all Group A problems are provided in the envelopes of laboratory material accompanying the text.

Journal, ledger, and analysis paper is suitable for solutions to most of the Group B problems. A pad of such paper, as well as some ruled forms more specifically adapted to the solutions of some problems, is available.

If no year is stated in the questions, problems, and practice sets, use the current year.

ASSIGNMENT MATERIAL FOR CHAPTER 1

Questions

1. Define assets, liabilities, and net worth.

2. What are some of the reasons why assets have value?

3. In what way are liabilities and net worth similar? In what way are they different?

4. Write three short sentences illustrating different uses of the word *debit*, and one illustrating the use of *debited*.

5. Which of the following equations are statements of fact?
   - (a) Assets + Liabilities = Net Worth
   - (b) Assets − Liabilities = Net Worth
   - (c) Assets − Net Worth = Liabilities
   - (d) Assets + Net Worth = Liabilities
   - (e) Assets = Liabilities + Net Worth

6. A balance sheet is an expression of one of the foregoing equations. Which one?

7. How are assets, liabilities, and net worth affected by each of the following transactions?
   - (a) Investment of $10,000.00 by stockholders in exchange for capital stock.
   - (b) Purchase of a truck on account for $2,000.00 from Acme Truck Co.
   - (c) Receipt of a $500.00 fee in cash.
   - (d) Payment of $1,000.00 to Acme Truck Co. on account.
   - (e) Payment of $150.00 for expenses.

8. Give rules for debiting and crediting:
   - (a) Assets accounts.
   - (b) Liability accounts.
   - (c) Net worth accounts.

9. What is the purpose of taking a trial balance?

10. What facts are shown by the heading of a trial balance?

11. What facts are shown by the heading of a balance sheet?

12. On which side of a balance sheet should you show:
    - (a) Assets?
    - (b) Liabilities?
    - (c) Net worth?

13. Why are the two sides of a balance sheet equal?

14. The net worth of a corporation is shown in the balance sheet as the sum of two items. What are these two items, and what do they represent?

15. How may the surplus of a corporation be increased? How may it be decreased?

16. Why is double-entry bookkeeping so designated?

17. Should the amount receivable from each debtor and the amount payable to each creditor be shown in the balance sheet?

Problems—Group A

Problem A-1. Following are the transactions of Smythe Advertising Company for the month of February. Record the transactions in ledger accounts, take a trial balance, and prepare a balance sheet.

Feb. 1—F. B. Smythe and C. E. Ellis organized the Smythe Advertising Company. Smythe invested $10,000.00 and Ellis invested $15,000.00; capital stock of $25,000.00 par value was issued to them.
3—The company purchased office furniture for $5,000.00 from The Cooper Company, on account.
4—Rent for the month was paid, in the amount of $500.00.
6—Sundry expenses totaling $400.00 were paid.
10—Collected fees of $5,000.00 from various clients for services during February.
15—Paid The Cooper Company $2,500.00 on account.
17—A contract was obtained from the firm of Barton and Brooks for services to extend over several months. The amount billed for February was $1,000.00. Nothing was collected at this time.
27—Paid salaries totaling $3,000.00.
28—Collected $500.00 from Barton and Brooks.
28—Paid a dividend of $250.00.

Problem A-2. Record the following transactions in ledger accounts, take a rial balance, and prepare a balance sheet.

May 1—O. E. Neff and B. E. Bates organized a corporation known as Caterers, Inc. Each contributed $5,000.00 in cash, and shares of capital stock were issued to them.
3—The company paid $5,000.00 for service equipment.
4—Purchased office equipment, $400.00, from G. E. Robertson on account.
8—Collected $250.00 for services at a banquet.
9—Paid $135.00 for materials used at the banquet.
13—Charged Frank Lane $350.00 for catering service at his daughter's wedding.
15—Paid $265.00 for materials used at the wedding.
16—Paid G. E. Robertson $250.00 on account.
17—Paid $75.00 for rent for the first half of the month.
18—Collected $200.00 from Frank Lane on account.
19—Miscellaneous expenses totaling $75.00 were paid in cash.
22—Collected $575.00 from The Gorham Company for catering services at their employees' annual party.
24—Paid $320.00 for materials used at the party.
25—Collected $375.00 for services at a college reunion dinner.
25—Paid $60.00 to the entertainers hired for the dinner.
26—Paid $125.00 for materials used at the dinner.
27—Collected $50.00 from Frank Lane to apply on account.
28—Paid rent, $75.00, for the last half of the month.
30—Paid salaries for the month, $250.00.
31—Paid a dividend of $100.00.

Problems—Group B

Problem B-1 The Kenyon Company was organized on July 1, 19—, and capital stock was issued in the amount of $10,000 00. During the month, the income of the company totaled $975 00, the expenses totaled $600 00 and a dividend of $100 00 was paid.

Compute the amount of surplus and the amount of net worth to be shown in the July 31 balance sheet.

Problem B-2 During August The Kenyon Company's income amounted to $1,100 00, its expenses totaled $795 00, and a dividend of $100 00 was paid. Compute the amount of surplus and the amount of net worth to be shown in the August 31 balance sheet.

Problem B-3 Following is a trial balance taken from the books of Comstock Corporation at the end of the first year of its operation. Prepare a balance sheet of the corporation.

COMSTOCK CORPORATION
Trial Balance
December 31, 19—

Cash	1 616 00	
Tim McLean	715 00	
Jay Barr	1 280 00	
Office Equipment	1 395 00	
Advertising Signs	862 00	
Fitch Payne		193 00
Arthur Young		286 00
Capital Stock		5 000 00
Surplus		389 00
	5 868 00	5 868 00

Problem B-4 Record the following transactions in ledger accounts. Allow eight lines for each account.

Oct 1—O E Matthews and H O Wharton organized The W J O Company for the purpose of leasing and operating radio broadcasting station WJO. Each invested $10,000 00 in cash, and $20 000 00 of capital stock was issued to them.
2—They paid $1 000 00 as rent for the broadcasting station for the month.
4—Purchased $3,500 00 worth of equipment from The Parker Company on account.
5—Collected $1,800 00 from various companies on contracts to advertise their products in the October programs.
6—Obtained an advertising contract from C E Dorman. The charge for October was $700 00. Nothing was collected at this time.
13—Paid miscellaneous expenses totaling $195 00.
17—Paid The Parker Company $1 500 00 on account.
23—Collected $500 00 from C E Dorman on account.
30—Paid salaries totaling $1 050 00.
31—Paid a dividend of $200 00.

After recording the transactions, compute the balance of each account (entering column totals and balances in pencil), and take a trial balance.

Prepare a balance sheet.

ASSIGNMENT MATERIAL FOR CHAPTER 2

Questions

1. Why is it desirable to record surplus increases and decreases in income, expense, and dividend accounts instead of directly in the Surplus account?

2. Should an income account have a debit or a credit balance?

3. Should an expense account have a debit or a credit balance?

4. Should the Dividends account have a debit or a credit balance?

5. If you were to add the balances of all income accounts and from the total deduct the sum of the balances of all the expense accounts, what would the remainder represent?

6. If, from the remainder determined by the procedure described in the preceding question, you were to deduct the balance in the Dividends account, what would the remainder represent?

7. When separate accounts are kept with income, expense, and dividends, how does the trial balance differ from the balance sheet?

8. Why is it desirable to record transactions in the journal before recording them in the ledger?

9. Why is a journal called a book of original entry?

10. What facts are shown by a journal entry?

11. Describe the steps in posting a journal entry.

12. The entering of the journal page number in the ledger and the ledger page number in the journal serves two purposes. What are they?

13. Why do some bookkeepers prefer to post all the journal debits before posting any of the credits?

14. Why is it usually unnecessary to write any explanations in the ledger accounts when entries are posted from the journal?

15. If the trial balance *does not* balance, the *following steps should be taken:*
   (a) Refoot the trial balance.
   (b) See that the balances have been carried correctly from the ledger to the trial balance. In taking this step, for what three possible errors should you watch?
   (c) Recompute the ledger balances. How is this done?
   (d) Check the postings from the journal to the ledger.
      For what three possible errors should you watch?
      What use is made of check marks in the performance of this operation?
      After this checking has been completed, you should look for unchecked items in the:
         Journal. What would such unchecked items indicate?
         Ledger. What would such unchecked items indicate?
   (e) See that the debit and credit amounts in each journal entry are equal.

16 In what ways do the headings of a trial balance and a balance sheet differ from the headings of a statement of income and expense and a statement of surplus?

17 A balance sheet shows the surplus at the date of the statement. Where is this information obtained?

18 What information is shown by a statement of surplus and where is it obtained?

19 What information is shown by a statement of income and expense, and where is it obtained?

Problems—Group A

Problem A-1. The transactions listed below are those of the Landers Corporation, which was organized on August 1 Journalize these transactions and post to the ledger accounts. Take a trial balance Prepare a statement of income and expense a statement of surplus, and a balance sheet For the names of the accounts to be used, refer to the ledger in the accompanying laboratory material.

Aug 1—Capital stock of a par value of $5 000 00 was issued for cash.
2—Office equipment was purchased for $500 00 on account from Z C Brock.
4—Office rent for the month amounting to $150 00 was paid in cash.
6—Purchased stationery ink and other office supplies for cash, $25 00
8—The company is engaged in the business of landscaping One job was finished today and $400.00 was collected for the work done
13—Paid $75 00 for materials used.
15—The total charge for work finished today for T L. Martin was $500 00 Nothing was collected from Martin.
18—Paid Z C Brock $275 00 on account
19—Paid $100 00 for supplies used on completed work.
25—Collected $300 00 from T L Martin on account.
29—Salaries of $300 00 were paid
31—Stockholders were paid a dividend of $200 00

Problem A-2. This problem is based on the transactions of Caterers, Inc., in Chapter 1 Make journal entries for the transactions (the accounts to be used are shown in the ledger in the laboratory material) post, take a trial balance, prepare a statement of income and expense, a statement of surplus, and a balance sheet

Problems—Group B

Problem B-1. Set up statements properly reflecting the information which the following statement was intended to show

THE VICTOR COMPANY
Statement of Income, Expense, and Dividends
December 31, 19—

Income from Fees		$5 500 00
Deduct		
Expenses	$4 200 00	
Dividends	500 00	4 700 00
Net Income for the Year		$ 800 00

Problem B-2. Using the information shown by the following accounts, prepare a statement of income and expense, and a statement of surplus of The Union Company.

Commissions Earned

					19—				
					Jan.	2		1	300.00
						25		1	200.00
					Feb.	21		2	175.00
					Mar.	16		3	450.00
					Apr.	30		4	375.00
					June	10		6	425.00
					July	28		7	175.00
					Sept.	18		9	225.00
					Nov.	12		11	200.00
					Dec.	16		12	250.00

Expense

19—									
Jan.	12		1	150.00					
Feb.	14		2	275.00					
Mar.	8		3	75.00					
	25		3	125.00					
May	13		5	200.00					
June	20		6	225.00					
Aug.	22		8	100.00					
Oct.	9		10	175.00					
Nov.	16		11	150.00					
Dec.	17		12	325.00					

Dividends

19—									
June	30		6	400.00					
Dec.	31		12	400.00					

Problem B-3. Journalize the following transactions of The Rembrandt Company for the month of June. Use account titles which you consider appropriate.

June 1—The corporation was organized, and capital stock of a par value of \$2,500.00 was issued for cash.
3—Office rent for the month was paid in cash, \$125.00.
4—Purchased office equipment, \$375.00, from J. K. Lathrop, on account.
5—Purchased office supplies for cash, \$15.00.
12—The company is engaged in interior decorating. \$250.00 was collected today for work done.
14—Paid \$62.00 for supplies used.
17—Paid J. K. Lathrop \$250.00 on account.
22—Charged S. M. Benton \$345.00 for work done in his home. Nothing was collected from him.
23—Paid \$79.00 for supplies used in Benton's home.
26—Collected \$200.00 from S. M. Benton on account.
30—Paid a dividend of \$250.00.

Post. Allow ten lines for the Cash account, seven lines for the Expense account, and five lines each for all other accounts. Take a trial balance. Prepare a statement of income and expense, a statement of surplus, and a balance sheet.

ASSIGNMENT MATERIAL FOR CHAPTER 3

Questions

1. What is the purpose of preparing working papers?

2. Is it always desirable to prepare working papers before preparing the statement of income and expense, the statement of surplus and the balance sheet?

3 After entering the account balances in the Trial Balance columns of the working papers, to what column would you extend the balance of each of the following accounts?

Capital Stock
Income from Fees
Cash
James Brown (an account receivable)
Dividends
William Smith (an account payable)
Furniture and Fixtures
Expense

4. How is the net income for the period determined in the working papers? In what columns is the amount of net income entered in the working papers? Why is it entered in these columns?

5 Assume that the total of the items in the Income and Expense debit column exceeded the total of the items in the Income and Expense credit column What would be indicated? How would you deal with this situation in the working papers?

6 How is the surplus at the end of the period determined in the working papers? In what columns is the amount of surplus entered in the working papers? Why is it entered in these columns?

7 If, after completing the working papers, you found that the Balance Sheet columns did not balance, what steps would you take to locate the error?

8 How are statements prepared from the working papers?

9 What items appear in the working papers which do not appear in the trial balance?

Problems—Group A

Problem A-1. From the following trial balance, prepare working papers for the month Also prepare a statement of income and expense, a statement of surplus, and a balance sheet

DELIVERERS, INC.
Trial Balance
June 30, 19—

Cash	3,369 00
C E Wolfe	295 00
Delivery Trucks	3,950 00

Hayward Motors Company		1,900 00
The Peebles Company		625 00
Capital Stock		5,000 00
Delivery Income		1,315 00
Expense	976 00	
Dividends	250 00	
	8,840 00	8,840 00

Problem A-2. Journalize the following transactions:

Mar. 1—Josef Allison and Robert Benson organized a corporation, known as Actors, Inc. The stockholders were five actors and actresses, and the company was organized for the purpose of presenting a series of plays. There were 50 shares of stock of $100 00 par value All the stock was sold for cash.

2—Paid $2,000.00 for costumes.

5—Paid $25 00 as a royalty on a play. (Charge Expense)

8—Purchased an automobile and trailer in which to travel This equipment was bought from the Loop Motor Company for $2,000 00; a cash payment of $750 00 was made on account. (To record this transaction, make an entry for the purchase, debiting the Automobile *account; make another entry for the payment*)

11—Rented an unused theater in which to rehearse, paid rent of $75.00 for the remainder of the month.

12—Collected a fee of $300 00 for presenting the play "Hoofbeats" for the Libertyville Ladies Club. (Credit Income from Billings)

18—Paid $20.00 for expenses incurred in connection with operation of the automobile.

22—Charged the Junction City Country Club a fee of $275 00 for presenting a play.

25—Collected $175.00 from the Junction City Country Club to apply on account.

26—Charged the Professional Men's Club $250.00 for presenting a play. Only $125 00 of this amount was collected (Make two entries)

29—Paid actors' salaries of $500 00

29—The Junction City Country Club paid the balance of its account.

30—Collected $100.00 for a one-act play

31—Paid a dividend of $150 00.

Post the journal entries. Prepare working papers, statement of income and expense, statement of surplus, and balance sheet.

Problems—Group B

Problem B-1. Prepare working papers for the year ended December 31, 19– , using the information in the following trial balance:

HUDSON COMPANY
Trial Balance
December 31, 19—

Cash	5,800 00	
David Bristol	620 00	
Office Furniture	2,575 00	

Willis Bailey		960 00
Capital Stock		5 000 00
Income from Services		13 975 00
Expense	9 850 00	
Dividends	1 000 00	
	19 935 00	19 935 00

Problem B-2. Prepare working papers for the month of September 19—, from the information in the following trial balance

THE WHARTON COMPANY
Trial Balance
September 30 19—

Cash	2 326 19	
Dudley Inc	195 22	
Ruggles & Co	217 35	
Barton and Price	526 61	
Bus Equipment	45 940 00	
Office Equipment	2 986 50	
Gas and Oil on Hand	320 75	
Hurd Corporation		1 269 60
Bassett and Company		1 137 25
Capital Stock		35 000 00
Surplus (August 31)		14 955 90
Income from Fares		2 876 80
Income from Charter Parties		927 00
Income from Advertising		218 00
Expense	3 521 93	
Dividends	350 00	
	56 384 55	56 384 55

Problem B-3 Following is the trial balance of Oldham Company on May 31, 19— at the close of the first month of its operations The company operates a typing service

OLDHAM COMPANY
Trial Balance
May 31 19—

Cash	2 544 00	
Peter Smith & Co	196 00	
David Bolton	208 00	
Griffith Company	135 00	
Office Equipment	2 000 00	
Neon Window Sign	350 00	
Supplies on Hand	175 00	
Office Supply Company		473 00
Capital Stock		5 000 00
Income from Typing		1 350 00
Expense	965 00	
Dividends	250 00	
	6 823 00	6 823 00

Prepare working papers statement of income and expense statement of surplus, and balance sheet

ASSIGNMENT MATERIAL FOR CHAPTER 4

Questions

1. What is meant by "closing the books"?

2. What is the purpose of closing the books?

3. What accounts are closed to Profit and Loss, and why are they closed to that account instead of directly to Surplus?

4. What accounts are closed to Surplus?

5. After the income accounts are closed, does the Profit and Loss account have a debit or a credit balance? What does this balance show?

6. After the expense accounts also are closed, does the Profit and Loss account have a debit or a credit balance? What does the balance show?

7. If the Surplus account has a balance before the books are closed, what does this balance represent?

8. What does the balance in the Surplus account show after the books are closed?

9. After the books are closed

   What classes of accounts have no balances?
   What classes of accounts have balances?

10. The illustrations in this chapter show the accounts of White Realtors Corporation after the books have been closed at the end of July. What facts will be shown by the August 31 balance in the Commissions Earned account, in the Expense account, in the Dividends account, and in the Surplus account before the books are closed, and in the Surplus account after the books are closed?

11. What is the purpose of taking a trial balance after closing the books?

12. Assume that White Realtors Corporation did not close its books at the end of July. State the facts which would be shown by the August 31 balances of the following accounts:

    Commissions Earned.
    Expense.
    Dividends.

13. Assume that a company prepares statements and closes its books annually. State the various steps in the accounting procedure for the year.

14. Assume that a company prepares statements at the end of each month, but closes its books only once a year. What would be the end-of-month routine of such a company?

15. In what records, statements, and so forth, should dollar signs be used, and where should they not be used?

16. What are the rules for placing dollar signs in statements?

Problems—Group A

Problem A-1 The laboratory material contains a sheet of working papers on which has been entered the December 31, 19— trial balance of The Wentworth Company, which is engaged in fur repairs and storage Complete the working papers, and prepare journal entries to close the books

Problem A 2 Following is the December 31st trial balance of The Valley Center Company which is in the business of soybean processing The beans are not purchased from producers the company's earnings consist wholly of charges for processing

Cash	23 360 00	
Accounts Receivable (Total)	19 235 00	
Plant and Machinery	84 320 00	
Office Equipment	3 000 00	
Accounts Payable (Total)		15 980 00
Capital Stock		100 000 00
Surplus (January 1 19—)		7 710 00
Processing Income		40 595 00
Expense	24 370 00	
Dividends	10 000 00	
	164 285 00	164 285 00

Prepare

(a) Working papers
(b) Statement of income and expense for the year
(c) Statement of surplus for the year
(d) Balance sheet

Draft the journal entries to close the books, post the closing entries, and rule off all closed accounts

Submit an after closing trial balance

Problems—Group B

Problem B 1 Using the information in the following trial balance, make journal entries to close the books

SANDERSON & COMPANY
Trial Balance
December 31, 19—

Cash	2 644 30	
John Gates	218 00	
Philip Magee	123 00	
Equipment	1 975 00	
Supplies on Hand	327 00	
Dobson Supply House		926 00
Capital Stock		3 000 00
Furniture Repair Income		4 976 50
Expense	3 015 20	
Dividends	600 00	
	8 902 50	8 902 50

Problem B-2. Using the information in the following trial balance, prepare journal entries to close the books.

HENDERSON GARDEN SERVICE
Trial Balance
July 31, 19—

Cash	1,481.00	
Henry Morgan	196.00	
Service Equipment	3,179.00	
Madison and Company		427.00
Capital Stock		4,000.00
Landscape Gardening Income		1,316.00
Yard Service Income		726.00
Expense	1,413.00	
Dividends	200.00	
	6,469.00	6,469.00

Set up ledger accounts and enter the balances as illustrated below:

Cash (Page 1)

19—				
July 31	Balance	1,481.00		

Place the accounts on the page as follows:

	Write Account Name on Line No.	Give the Accounts Page Numbers as Follows
Cash	1	1
Henry Morgan	4	2
Service Equipment	8	3
Madison and Company	12	4
Capital Stock	16	5
Surplus	20	6
Landscape Gardening Income	24	7
Yard Service Income	28	8
Expense	32	9
Profit and Loss	37	10
Dividends	42	11

Post the closing entries to these accounts, and take an after-closing trial balance.

Problem B-3. Set up accounts (in the manner shown in problem B-2) on ledger paper, entering December 31 balances of Little's Food Lockers, Inc., as indicated on page 524.

The books were closed at the end of the preceding year.
Prepare working papers for the year.
Prepare a statement of income and expense, a statement of surplus, and a balance sheet.
Prepare and post closing journal entries.
Take an after-closing trial balance.

Account Name	Account Page No	Balances Debit	Balances Credit	Lines Required
Cash	1	$ 3 484 00		4
Hamilton Company	2	360 00		4
Equipment	3	15 600 00		4
Frazier & Co	4		$ 1 213 00	4
Capital Stock	5		15 000 00	4
Surplus	6		986 00	6
Locker Rental Income	7		8 960 00	5
Expense	8	6 115 00		5
Dividends	9	600 00		5
Profit and Loss	10			5
		$26 159 00	$26 159 00	

ASSIGNMENT MATERIAL FOR CHAPTER 5

Questions

1. What is meant by a system of internal control?

2. Explain the purpose of the following documents prepared by a seller of merchandise:

   (a) Invoice:
      Original.
      First carbon.
      Second carbon.
   (b) Monthly statement.

3. Explain the purpose of the following forms prepared by a purchaser of merchandise:

   (a) Purchase requisition.
   (b) Purchase order:
      Original.
      First carbon.
      Second carbon.

4. What is the purpose of omitting the quantities ordered from the copy of the purchase order sent to the receiving department?

5. Describe the procedure of checking an invoice for goods purchased.

6. How should invoices be filed to be sure they are paid within the discount period?

7. The terms of an invoice are: 1 10; n/30. What does this mean?

8. When a remittance is sent to a creditor, how may the creditor be informed as to the particular invoice being paid?

9. What information is required for the profit and loss statement of a merchandising business?

10. How is the cost of goods sold determined?

11. Why is the inventory at the end of the period entered in the Profit and Loss credit column and in the Balance Sheet debit column of the working papers?

12. The Inventory account may have a balance both before and after closing the books, but the balance after closing is different from the balance before closing. What is the reason for this?

13. The net profit for the period is closed to the Surplus account; then why does the balance in the Surplus account not necessarily show the net profit for the period?

14. What is a debit balance in the Surplus account called? Under what circumstances would you expect the account to have a debit balance?

15. If a company suffers a loss during the first year of operations, will it have a surplus or a deficit? How should it be shown in the balance sheet?

Problems—Group A

Problem A-1 The laboratory material contains a ledger of Maywood Corporation, showing balances at the end of the month, as in the following trial balance

MAYWOOD CORPORATION
Trial Balance
October 31, 19—

Cash	5 600 00	
James Brown	4 200 00	
Inventory (September 30 19—)	1 600 00	
Furniture and Fixtures	2 500 00	
David Henderson		800 00
Capital Stock		10 000 00
Surplus (September 30, 19—)		1 220 00
Sales		7,900 00
Purchases	5 700 00	
Expense	320 00	
	19 920 00	19 920 00

The inventory on October 31, 19—, was $700 00

Prepare
- Working papers
- Statements for October
- Journal entries to close the ledger Post these entries and close the accounts
- An after-closing trial balance

Problem A-2 Following are the transactions of the Wichita Sales Company for the month of June

June 1—The company was organized by Gordon Fleet and Hobart Coulson, who invested $15 000 00 and $10 000 00, respectively Each received capital stock of the same amount as the cash he invested
2—Store equipment costing $1,250 00 was purchased for cash
3—Merchandise in the amount of $1,500 00 was purchased from J V Seifert, $500 00 was paid on account
4—Purchased typewriters, desks, and tables for cash, $600 00 (Debit Office Equipment)
6—Paid June store rent, $125 00
8—Purchased office supplies for cash, $60 00 (Charge Expense)
9—Paid J V Seifert $225 00 on account
10—Sold merchandise to H F Harmon on account, $2,175 00
11—Purchased merchandise for cash $800 00
12—Sold merchandise on account to P S Schmidt, $220 00
13—Paid J V Seifert $225 00 on account
15—Paid clerk's salary for first hal of June, $65 00
16—Merchandise was purchased on account from F F Ford, $1,120 00
17—Merchandise was sold for cash, $550 00
18—H F Harmon paid his account in full, $2 175 00
19—Sold merchandise on account to E E Smith $450 00
Sold merchandise on account to H F Harmon, $200 00

June 20—Purchased an office desk for cash, $125 00.
Paid J. V. Seifert the balance of his account, $550 00.
22—Cash sale of merchandise, $900 00.
23—Purchased merchandise on account from J. V. Seifert, $600 00.
25—P. S. Schmidt paid $125 00 on account.
26—Paid F. F. Ford $600 00 on account.
Sold merchandise on account to P S Schmidt, $100 00.
Received $200.00 on account from E. E Smith
30—*Paid clerk's salary for last half of month, $65 00*
Paid the June light and water bill, $70.00.
Paid the June telephone bill, $12.00.
Paid a dividend of $450.00.

Journalize the above transactions.
Post the entries to ledger accounts.
Prepare (a) working papers, (b) a profit and loss statement, (c) a surplus statement, and (d) a balance sheet.
Make and post journal entries to close the books, and prepare an after-closing trial balance.
The inventory on June 30 amounted to $1,050.00.

Problems—Group B

Problem B-1. Following is a trial balance of The Lyle Company on November 30, 19—:

Account No			
1	Cash	500 00	
2	Robert Owen	1,000 00	
3	Inventory (October 31, 19—)	750 00	
4	Furniture and Fixtures	500 00	
5	J. C. Wright, Inc		300 00
6	Capital Stock		2,500 00
7	Surplus (October 31, 19—)		500 00
8	Sales		3,000 00
9	Purchases	2,500 00	
10	Expense	1,050 00	
		6,300 00	6,300 00

The inventory on November 30, 19— was $1,500.00
Set up ledger accounts and enter the balances shown by the trial balance. Allow eight lines for each account.
Prepare:
Working papers for November.
Statements for November.
Write up and post the entries necessary to close the books.
Take an after-closing trial balance.

Problem B-2. The statements on page 528 were prepared by Kronk & Company.

KRONK & COMPANY
Statement of Profit and Loss
For the Year Ended December 31 19—

Gross Sales		$81 375 96
Deduct Cost of Goods Sold		
Inventory at the Beginning of the Year	$13 972 80	
Add Purchases	66 321 54	
Total	$80 294 34	
Deduct Inventory at the End of the Year	14 210 93	
Cost of Goods Sold		66 083 41
Gross Profit on Sales		$15 292 55
Deduct Expenses		10 213 38
Net Profit		$ 5 079 17

KRONK & COMPANY
Statement of Surplus
For the Year Ended December 31, 19—

Surplus at the Beginning of the Year	$19 216 37
Add Net Profit	5 079 17
Total	$24,295 54
Deduct Dividends	2 000 00
Surplus at the End of the Year	$22 295 54

KRONK & COMPANY
Balance Sheet
December 31 19—

Assets		Liabilities and Net Worth		
Cash	$ 7 053 04	Liabilities		
Accounts Receivable	11,271 80	Accounts Payable		$ 3 915 23
Inventory	14,210 93			
Store Equipment	13 675 00			
		Net Worth		
		Capital Stock	$20 000 00	
		Surplus	22 295 54	42 295 54
	$46 210 77			$46 210 77

Reconstruct the trial balance

Problem B-3 Using the information in the following trial balance prepare journal entries to close the books The company occupies the ground floor of its building and rents offices on the second floor It also makes deliveries for other stores

THE PERRY COMPANY
Trial Balance
December 31, 19—

Cash	3 876 00
Inventory	13 680 00
Land	1 000 00
Building	9 700 00
Delivery Equipment	1,800 00

Capital Stock		25,000 00
Surplus		9,066 00
Sales		92 540 00
Purchases	72,690 00	
Rent Income		1,600 00
Delivery Income		900 00
Expense	23,860 00	
Dividends	2,500 00	
	129 106 00	129,106 00

The inventory of merchandise at the end of the year was $12,387 00

Problem B-4. Using the following information, prepare a profit and loss statement of Maxwell, Incorporated, for the year ended December 31, 19—.

Sales	$93,323 94
Inventory at the beginning of the period	13,289 60
Purchases	81,216 39
Inventory at the end of the period	12,318 45
Expenses	9,218 60

Problem B-5. Using the following information, prepare a profit and loss statement for Hadley and Rodgers for the month of June, 19—.

Sales	$16,450 97
Inventory, May 31	11,423 78
Purchases	21,872 40
Inventory, June 30	16,239 67
Expenses	1,397.21

ASSIGNMENT MATERIAL FOR CHAPTER 6

Questions

1 A merchant purchased 200 articles listed in a catalogue at \$25 00 each, less a trade discount of 40% What was the amount of the invoice?

This invoice was subject to a 2% cash discount if paid within 10 days What net amount would pay the invoice within the discount period?

2 Find the net amount of the following purchase after deducting all discounts

List price, \$975 00
Trade discounts—40%, 10% and 5%
Cash discount—1% if paid within 10 days

3 Freight terms may be "f o b destination" or "f o b shipping point" Distinguish between the two

4 A merchant in Chicago purchased a \$675 00 bill of goods from a manufacturer in New York, terms f o b Chicago Cash discount, 1% in 10 days

(a) The freight (\$25 00) was paid by the seller What remittance by the purchaser will pay the invoice within 10 days?

(b) Assume that the manufacturer asked the Chicago merchant to pay the freight and deduct the amount thereof when making his remittance What remittance by the purchaser will pay the invoice within 10 days?

5 Following are assumed facts relative to certain sales made by the *X* Company to four of its customers Determine, in each instance, the smallest remittance which will effect full settlement

(a) Sale on October 1 to *A*, \$200 00, terms 2/10 n/30, f o b destination. On October 5 a credit memorandum for \$15 00 was issued to *A*. On October 9 a check was received from *A* for the net amount

(b) Sale on October 9 to *B*, \$1 000 00 terms 1 15 n/30, f o b shipping point *X* Company paid \$60 00 freight on the shipment *B* mailed a check in full settlement on October 27

(c) Sale on October 17 to *C*, list price, \$5,000 00, dealers' discount, 30% terms, 2/10, n/30, f o b destination *C* paid \$425 00 freight on the shipment, and mailed a check on October 26 in settlement

(d) Sale on October 25 to *D* list price \$3,000 00, dealers discount, 20%, terms, n/30, f o b shipping point *D*'s business establishment was located in the same city as that of the *X* Company Since *D* had no facilities for picking up the merchandise, the X Company agreed to deliver it for \$50 00 On November 20, *D* sent X Company a check in full settlement

6 What is the purpose of keeping numerous expense accounts?

7. In what three groups are expenses classified in the income and expense statement?

8 What is the distinction between freight in and freight out, and how is each classified in the profit and loss statement?

9 What is the object of assigning exhibit letters (Exhibit A, Exhibit B, and so forth) to the various statements?

10. Net Sales − Cost of Goods Sold = Gross Profit on Sales. Show, by similar equations, how the following items are computed:

Net Sales.
Cost of Goods Sold.
Net Profit on Sales.
Net Profit on Operations.
Net Profit on Operations and Other Income.
Net Income.
Surplus at the End of the Period.
Net Worth.

11. What is the purpose of ruling and lettering accounts with debtors and creditors?

Problems—Group A

Problem A-1. Below is a list of the transactions of The Yates Company for the month of February. Journalize the transactions. The accounts to be used are indicated by the account titles on the ledger sheets in the laboratory material and in the trial balance columns of the working papers.

After journalizing each day's transactions, post to the ledger. Letter the entries in the personal accounts which apply against each other, and rule the personal accounts below balancing debits and credits.

Feb. 1—The Yates Company was organized to take over the business formerly operated by John Yates. Yates turned over merchandise valued at $15,000.00 (Charge Merchandise Inventory), furniture and fixtures valued at $5,000.00, and an account receivable from Davis & Co. of $5,000.00, in return for capital stock of $25,000.00. C. E. Hawes subscribed for $25,000.00 of stock and paid his subscription in cash.

2—The following expenses were paid in cash:

Store rent	$200.00
Insurance	300.00
Office supplies	50.00

3—Purchased merchandise from J. Newton on account, $4,500.00; terms, 2/10; n/30.

4—Sold merchandise to D. P. Mason on account, $2,000.00; terms, 2/10; n/30. All sales are made on the same terms.

Sold merchandise to Martin Olander on account, $1,700.00.

5—Paid J. Newton's invoice of February 3 as follows:

Invoice	$4,500.00
2% cash discount	90.00
Cash	$4,410.00

Paid advertising bill, $200.00.

6—D. P. Mason was given credit memo No. 1 for $100.00.

8—Made cash sales of merchandise, $1,000.00.

9—Purchased a delivery truck from The Automobile Company for $3,500.00. Paid cash in full.

Feb 10—D P Mason paid his invoice of February 4 as follows

Invoice	$2 000 00
Less credit of February 6	100 00
Net	$1 900 00
Less 2% cash discount	38 00
Cash	$1 862 00

11—Received J Newton s credit memo No 1732 in the amount of $300 00 for merchandise returned

13—Purchased merchandise on account from Supplier Company $7 500 00 terms 2/10 n/30 f o b shipping point their invoice No B964

15—Paid clerk s salary $100 00 and truck driver s salary $125 00

17—Received $1 000 00 from Martin Olander on account

Paid freight $50 00 on shipment received from Supplier Company on February 13

19—Sold merchandise to Davis & Co on account $2 800 00 The freight terms were f o b destination

20—Martin Olander sent us a check for $666 00 which he apparently regarded as full settlement of his purchase on February 4 as follows

Invoice	$1 700 00
Collected on February 17	1 000 00
Balance	$ 700 00
2% cash discount	34 00
Cash	$ 666 00

We informed Olander that inasmuch as the 10-day discount period had expired we could not allow him the discount of $34 00

Sold Martin Olander merchandise on account $2 000 00 terms 2/10 n/30

22—Purchased merchandise from J Newton on account $1 500 00 terms 2 10 n/30 invoice No 1396

23—Paid Supplier Company $7 500 00

Martin Olander sent us his check for $34 00 to cover the balance of invoice No 2

24—Purchased merchandise from F B Watson on account $1 000 00 terms 1/10 n/30 invoice No 294

25—Paid for advertising $200 00 and for office supplies $50 00

26—Received credit memo No 202 from F B Watson for $60 00

Made cash sales of merchandise $700 00

27—Davis & Co settled for the invoice of February 19 as follows

Invoice	$2 800 00
Less cash discount 2%	56 00
Net	$2 744 00
Less freight paid	25 00
Cash	$2 719 00

The Supplier Company informed us that we neglected to take the 2% cash discount in our remittance of February 23 They enclosed a check for $150 00 the amount of the discount

Sold merchandise on account to Martin Olander $2 100 00 freight terms f o b destination

Feb. 27—Paid freight on shipment to Olander, $20.00.

Paid J. Newton the $1,200.00 balance on the invoice of February 22, less 2% discount. The remittance was computed as follows:

Invoice	$1,500.00
Less credit memo, Feb. 11	300.00
Balance	$1,200.00
Cash discount	24.00
Cash	$1,176.00

Paid clerk's salary, $100.00, and truck driver's salary, $125.00.

Allowed Martin Olander a credit of $50.00 for merchandise returned from sale of February 20; credit memo No. 2.

Olander paid our invoice of February 20, less the credit memo issued today and less 2% cash discount.

Collected $150.00 from Hudson's Hardware for delivery service.

Paid a dividend of $500.00.

After you have completed all postings, check your ledger balances with the trial balance furnished in the working papers in the laboratory material.

The inventory at the end of February was $19,600.00.

Complete the working papers and prepare a statement of profit and loss, a statement of surplus, and a balance sheet.

Prepare journal entries to close the books; post the entries and rule the closed accounts.

Take an after-closing trial balance.

Problems—Group B

Problem B-1. Journalize the following transactions:

May 1—Paid $23.50 freight on goods sold to T. B. Anderson; terms, f.o.b. destination.

2—Paid $21.75 freight on goods sold to J. B. Maloney; terms, f.o.b. shipping point.

3—Paid $35.12 freight on goods purchased from George Hanchett; terms, f.o.b. destination.

4—Paid $19.78 freight on goods purchased from D. F. Ferguson; terms, f.o.b. shipping point.

5—Sold merchandise to Peter Bane on account, $215.68; terms, f.o.b. destination. At our request Bane paid the freight.

6—Collected the $215.68 account from Peter Bane, less freight charges of $29.60.

8—Issued a credit memorandum for $60.00 to K. D. Cole because of unsatisfactory goods sold to him on account.

9—Sent Thomas Bailey a check for $25.00 because of unsatisfactory merchandise sold him for cash.

10—Received a credit memorandum for $75.00 from Judd and Boone for unsatisfactory merchandise purchased from them on account.

11—Received a check for $80.00 from Henry Hyde for unsatisfactory merchandise purchased from him on account.

12—Sold Duncan Frye on account merchandise quoted in our catalogue at $485.00, less trade discounts of 20% and 15%.

13—Collected from Duncan Frye the amount charged him for the sale yesterday, less a cash discount of 2%.

May 15—Paid Luther Lamb the \$285 00 balance owed him less a 1% cash discount

16—Fred Holmes owed us \$325 00 we received a check today for \$307 50 representing payment in full after deduction of a 2% cash discount and freight which he had paid for us although the terms of sale were f o b destination

Problem B 2 The following balances appear in the accounts of The *A B* Company on December 31

Cash	7 345 00	
Inventory (end of preceding year)	9 216 00	
Store Fixtures	4 600 00	
Capital Stock		10 000 00
Surplus		3 915 00
Sales		98 329 00
Returned Sales and Allowances	563 00	
Purchases	72 316 00	
Returned Purchases and Allowances		1 051 00
Freight In	1 167 00	
Advertising	1 278 00	
Salesmen s Salaries	7 000 00	
Salesmen s Commissions	2 150 00	
Salesmen s Expenses	2 316 00	
Packing Labor and Expense	912 00	
Freight Out	790 00	
Cartage Out	1 190 00	
Office Salaries	1 500 00	
Taxes	272 00	
Insurance	216 00	
Office Stationery	219 00	
Telephone and Telegraph	180 00	
Legal Expenses	300 00	
Postage	70 00	
Donations	175 00	
Discount on Purchases		1 312 00
Discount on Sales	820 00	
	114 607 00	114 607 00

The inventory at the end of the year was \$8 635 00

Prepare working papers

Problem B 3 Refer to Problem B 2 and prepare a statement of profit and loss for the year

Problem B-4 Refer to Problem B 2 and prepare journal entries to close the books

ASSIGNMENT MATERIAL FOR CHAPTER 7

Questions

1. What is the meaning of the following terms?
   Negotiable promissory note.
   Maker.
   Payee.
   Maturity.
   Note receivable.
   Note payable.
   Dishonor.
   Interest income.
   Interest expense.
   Renewal note.

2. In what ways may the maturity of a note be indicated?

3. What is the maturity of a note dated December 23, 1948, due:
   (a) Four months after date?
   (b) 120 days after date?

4. What is the maturity of a note dated February 29, 1948, due:
   (a) One year after date?
   (b) Three months after date?
   (c) 105 days after date?

5. If the maker of a note dishonors it at maturity, the payee should charge it to the maker's account. Why?

6. Why is it unnecessary for the maker of a note to make a similar entry, if he dishonors it, transferring the liability from the Notes Payable account to a personal account with the payee?

7. We sold goods to James Keegan and received a note; the bookkeeper recorded the transaction as follows:

Notes Receivable .	300.00	
Sales.		300.00

State how you think the transaction should have been recorded, and give your reason.

8. Interpret the following journal entries: (The transactions are unrelated.)

(a) Notes Receivable.	1,000.00	
Cash.		1,000.00
(b) Cash.	5,050.00	
Notes Receivable. . .		5,000.00
Interest Income.		50.00
(c) Horace Magee.	2,020.00	
Notes Receivable.		2,000.00
Interest Income.		20.00

(d) Interest Expense	30 00	
Accrued Interest Payable		30 00
(e) Notes Payable	1 500 00	
Notes Payable		1 500 00
(f) Cash	990 00	
Interest Expense	10 00	
Notes Payable		1 000 00

Problems—Group A

Problem A 1 Journalize the following transactions In all interest computations use 360 days as a year

(1a) July 1—Borrowed $5 000 00 from March & Co on a 30-day non interest note
(1b) July 31—Paid the above note
(2a) July 3—Borrowed $5 000 00 from J R Barton on a 30-day 6% note
(2b) Aug 2—Paid the above note
(3a) July 5—Borrowed from the First National Bank by discounting our 30-day note payable for $3 000 00 Discount at 6% was deducted by the bank the proceeds were $2 985 00
(3b) Aug 4—Paid the above note
(4a) July 6—Loaned $1 000 00 to Frank Jones on a 30-day non interest note
(4b) Aug 5—Jones paid his note due today
(5a) July 10—Loaned $1 000 00 to Ralph Smith on a 60-day 6% note
(5b) Sept 8—Collected the Smith note and interest
(6a) July 7—Loaned John Black $1 000 00 on a 60-day note Gave him $990 00 after deducting discount at 6%
(6b) Sept 5—Black paid his note due today
(7a) July 9—Sold merchandise to Frank White on account $800 00
(7b) July 9—White gave us a 30-day 6% note for the amount of his account
(7c) Aug 8—White paid his note due today
(8a) July 17—Purchased merchandise from Brown & Co $1 200 00
(8b) July 17—Gave Brown & Co a 30-day 6% note for the amount of today's purchase
(8c) Aug 16—Paid the above note
(9a) Sept 14—Received a 30-day non interest note for $900 00 from George Whitely to apply on account
(9b) Oct 14—Whitely dishonored his note
(10a) Nov 10—Received a 30-day 6% note for $750 00 from Henry Cronk to apply on account
(10b) Dec 10—Cronk dishonored his note
(11a) Jan 9—Gave Gibbons & Co a 30-day, non interest note for $600 00 to apply on account
(11b) Feb 8—Dishonored our note to Gibbons & Co
(12a) Mar 10—Gave Kelly Brothers a 30-day, 6% note for $500 00 to apply on account
(12b) Apr 9—Dishonored the Kelly note
(13a) May 6—Received a 30-day non interest note for $1,500 00 from Joseph French to apply on account
(13b) June 5—Received a 30-day, non interest note from French in renewal of note due today

(14a) June 20—Gave Victor Burton a 30-day, non-interest note for $2,000.00 to apply on account.
(14b) July 20—Gave Burton a 30-day, non-interest note in renewal of the note due today.
(15a) Aug. 13—Received a 30-day, 6% note for $800.00 from Lewis Clarke to apply on account.
(15b) Sept. 12—Clarke dishonored his note due today.
(16a) Oct. 18—Gave Charles Norton a 30-day, 6% note for $450.00 to apply on account.
(16b) Nov. 17—Dishonored the Norton note.
(17a) Dec. 12—Received a 30-day, 6% note for $1,200.00 from Thomas Dutton to apply on account.
(17b) Jan. 11—Collected the interest on the Dutton note and $200.00 on the principal, and received a new 30-day, 6% note for the balance.

Problem A-2. Journalize the following transactions. Submit the ledger accounts with West, Towne, and Notes Receivable, properly ruled and lettered after posting the entries.

May 15—Sold merchandise to J. R. West, $3,500.00, and received his 30-day, 6% note in settlement.
17—Sold merchandise to David Towne, $6,250.00, and received his 30-day, 6% note in settlement.
23—Sold merchandise to J. R. West, on account, $1,720.00.
June 14—Collected the interest on the West note, and $1,500.00 on the principal. Also received a new 30-day, 6% note for the balance of the principal.
16—David Towne dishonored his note.

Problems—Group B

Problem B-1. Use a form similar to the following. Make the indicated interest computations, and enter your answers on the form. The interest on $2,875.00 at 6% for 60 days has been entered by way of illustration.

Time	Principal and Rate									
	$2,875.00 at 6%		$4,954.00 at 7%		$3,000.00 at 5%		$7,000.00 at 6½%		$9,000.00 at 4½%	
60 days	$28	75								
30 days										
20 days										
80 days										
45 days										
72 days										
113 days										
3 months										

Problem B-2 Using the information in the following trial balance prepare
Working papers
Statements for the month
Journal entries to close the books

MAPLETON COMPANY
Trial Balance
August 31 19—

Cash	1 204 00	
Notes Receivable	5 000 00	
Inventory	27 335 00	
Notes Payable		12 000 00
Capital Stock		25 000 00
Surplus (deficit)	4 166 00	
Sales		27 344 00
Purchases	24 618 00	
Selling Expenses	1 206 00	
General Expenses	873 00	
Discount on Purchases		317 00
Interest Income		25 00
Discount on Sales	214 00	
Interest Expense	70 00	
	64 686 00	64 686 00

Inventory August 31 $26 869 00

Problem B-3 Make journal entries to record the following transactions

Feb 17—Gave B E Rathbun a 30-day 6% note for $2 500 00 to apply on account
Mar 19—Paid Rathbun the interest on the above note and $1 000 00 on the principal and gave him a new 30-day 6% note for the balance
Apr 18—Paid the $1 500 00 note and interest

ASSIGNMENT MATERIAL FOR CHAPTER 8

Questions

1. In what two ways do the special books of original entry reduce bookkeeping work?

2. Do any advantages other than the saving of time and labor result from the use of special books of original entry?

3. To what accounts are the column totals posted at the end of the month from each of the special books of original entry described in this chapter? State, as to each column total, whether it is posted as a debit or a credit.

4. When special books of original entry are used, what entries are made in the journal?

5. If a journal is the only book of original entry in use, a trial balance can be taken daily. Is this possible when special books of original entry are used?

Problems—Group A

Problem A-1. Record the following transactions in the books of original entry named below:

(a) Journal.
(b) Purchase book.
(c) Returned purchases and allowances book.
(d) Sales book.
(e) Returned sales and allowances book.
(f) Cash receipts book.
(g) Cash disbursements book.

The accounts to be used are indicated in the ledger.

Aug. 1—L. W. Lewis and John M. Potkins formed the Lewpot Company with an authorized capital of \$20,000.00. Lewis received \$10,000.00 of stock, for which he paid cash; Potkins turned in \$6,200.00 of merchandise (charge Inventory) and store equipment valued at \$3,800.00, for which he received \$10,000.00 in capital stock.

2—Purchased a water cooler and filing cabinet on account from Dunlap Supply Company for \$175.00. This equipment is to be used in the office.

Sold merchandise for cash, \$250.00.

3—Purchased merchandise from Hahn and Company, \$800.00; their invoice dated August 2.

Sold merchandise for cash, \$300.00.

4—Sold merchandise on account to Sullivan Brothers, \$400.00. Invoice No. 101.

5—Paid August rent, \$125.00.

6—Purchased merchandise for cash, \$500.00.

Aug 8—Sold S S Ramsey merchandise on account, \$500 00 Invoice No 102
Purchased office supplies for cash, \$30 00
9—Sullivan Brothers paid \$150 00 on account
10—Sold merchandise to Arthur Vanderveer on account, \$600 00 Invoice No 103
Cash sale of merchandise \$350 00
11—Bought merchandise on account from Calvert Co, \$1,400 00 Their invoice dated August 7 We mailed them a check to apply on account, \$400 00
12—Mailed Hahn and Company a check for \$800 00 This paid their account in full
13—Purchased a truck from the Wengel Motor Company, \$1 000 00, paid \$400 00 on account
Sold merchandise for cash \$620 00
15—M O Jefferson purchased merchandise amounting to \$1,500 00 We received his check for \$500 00 and his 15-day 6% note for the balance Invoice No 104
Paid Calvert Co \$450 00 on account
16—Gave Sullivan Brothers credit for \$80 00 on merchandise returned Sent credit memo No 1 to them today
18—Sold merchandise on account to Sullivan Brothers, \$500 00 Invoice No 105
Sold merchandise for cash \$300 00
20—Calvert Co sent us their credit memo No 25 for \$75 00
23—Paid Dunlap Supply Company \$175 00 which settled their account in full.
Received \$200 00 from S S Ramsey
24—Purchased merchandise costing \$200 00 from Peters and Higgins their invoice dated August 23
25—Returned unusable merchandise costing \$60 00 to Peters and Higgins Make no entry until the receipt of their credit memo
26—Sent credit memo No 2 to Arthur Vanderveer for \$20 00
27—Received credit memo No 56 from Peters and Higgins for \$60 00
29—Sent Wengel Motor Company a 30-day 6% note for \$500 00 and a check for \$100 00
30—M O Jefferson paid his note with interest
Paid wages of \$300 00
31—Paid the electric light bill \$40 00
Paid a dividend of \$200 00

Post the above entries

Prepare working papers profit and loss statement, surplus statement, and balance sheet

Draft and post journal entries to close the books

Take an after-closing trial balance

The inventory on August 31 was \$4 700 00

Problems—Group B

Problem B-1 Record the following transactions in the books of original entry described in this chapter

Nov 1—Issued capital stock for cash, \$10 000 00
3—Cash purchase of merchandise, \$2 500 00

Nov. 5—Purchase of merchandise from Kellogg Bros. on account, $1,900.00. Invoice November 5.
7—Received $50.00 in cash as an allowance for unsatisfactory goods purchased on November 3.
9—Received credit memorandum 325 from Kellogg Bros., in the amount of $100.00 for unsatisfactory merchandise purchased November 5.
10—Gave a 20-day, 6% note to Kellogg Bros. for the balance owed them.
12—Sale on account to Hugo Ramsey, $1,050.00.
14—Sale of merchandise for cash, $750.00.
16—Issued credit memorandum No. 1 to Hugo Ramsey, $150.00.
18—Received a 10-day, 6% note from Hugo Ramsey for the balance of his account.
19—Discounted a 10-day note for $6,000.00 at the bank: discount rate, 6%
21—Sale on account to C. V. Ogden, $956.00.
22—Sent a customer a check for $35.00 as an allowance to apply on the cash sale of November 14.
23—Purchase of merchandise on account from H. J. French, $1,425.00.
24—Collected $956.00 from C. V. Ogden.
25—Paid expenses, $215.00.
27—Paid H. J. French in full.
28—Collected the Ramsey note and interest.
29—Paid the note given to the bank on November 19.
30—Paid the Kellogg Bros. note and interest.

Set up ledger accounts, allowing six lines for each account. Post and take a trial balance.

ASSIGNMENT MATERIAL FOR CHAPTER 9

Questions

1 What is the primary purpose of each of the money columns in the cash receipts book on page 111? If any column has any advantage other than the primary one, state what it is

2 What is the primary purpose of each of the money columns in the cash disbursements book on page 115? If any column has any advantage other than the primary one state what it is

3 If a business receives many notes do you think it would be desirable to have a special Notes Receivable credit column in the cash receipts book, so that the face of each note collected could be entered in the Notes Receivable column instead of the Sundry credit column? If you think it would be advantageous, give your reason If you do not think such a special column would be desirable, state your reason

Problems—Group A

Problem A-1 The transactions of Hennepin Sales Company are to be recorded in the following books of original entry

Sales book
Returned sales and allowances book
Purchase book
Returned purchases and allowances book

In the following list of transactions asterisks appear before the transactions which require entries in the four above-named books It is assumed that these transactions have been recorded by your assistant These four books, with entries made by your assistant, will be found in the laboratory material

Cash receipts book—with special columns
Cash disbursements book—with special columns
Journal

You are to make entries in the three last-named books of original entry, and make postings from all the books

The accounts to be used are shown in the ledger in the laboratory material

Oct 1— $15,000 00 of capital stock was sold at par for cash
*Received merchandise from the Gibralter Company, $900 00 invoice No 123 dated October 1
We sent the Gibralter Company our 15-day, 5% note for $900 00
2— Cash sale of merchandise $250 00
*Charles D Weeks purchased $1 000 00 of merchandise on account, invoice No 1

Oct. 4— We paid advertising bill of $30.00.
*Sold Arthur Cox merchandise in the amount of $500.00; our invoice No. 2.
Received a 10-day note from Cox for $500.00, the amount of the sale today.
5— Cash purchases of merchandise, $375.00.
*Bought merchandise from the Gibralter Company, $500.00; their invoice No. 160, dated October 4.
Gave the Gibralter Company a 15-day, 6% note for the amount of the purchase today.
6— Bought store fixtures from Carpenter & Co. on account, $4,000.00.
*Sold $800.00 of merchandise to L. F. Kuhl on account, invoice No. 3.
Received a 20-day, non-interest note, dated October 6, for $800.00, from L. F. Kuhl.
Paid an advertising bill of $150.00.
8— Gave a 15-day, 5% note to Carpenter & Co. for $4,000.00, the amount of our account with them.
*Issued credit memo No. 1 to Charles D. Weeks for $20.00 for unusable goods sold October 2.
*Sold L. M. Custer $450.00 of merchandise on account; invoice No. 4.
Discounted our 20-day note for $7,500.00 at the Second National Bank, which credited our account with the net proceeds, $7,475.00.
9—*Received merchandise from Smith and Brown, $450.00; their invoice No. 900, dated October 8, terms, 1½ 10 days, n/30.
Freight bills were paid as follows:

Freight in..	$40.00
Freight out.........	30.00

10—*Willis Roberts purchased $700.00 of merchandise on account; invoice No. 5.
11— Store rent for the month paid in cash, $125.00.
12—*Received Smith and Brown's credit memo No. 42 for $25.00 for moth-eaten goods included in their invoice of October 8.
*Sale on account to Charles D. Weeks, $325.00; invoice No. 6.
13—*Purchased merchandise from Smith and Brown, $400.00; their invoice No. 947, dated October 12, terms, 1½/10, n/30.
Cash sale of merchandise, $100.00.
Received check from Arthur Cox in payment of his note.
15—*Sold L. F. Kuhl $180.00 of merchandise on account; invoice No. 7.
Paid salesmen's salaries, $400.00.
Cash sale of merchandise, $200.00.
Received Charles D. Weeks' check for $960.40 in payment of our invoice of October 2, less return of $20.00 and less 2% discount. The discount was not allowed by us.
16—*Received credit memo No. 56 from the Gibralter Company for $13.20, because of unusable goods included in their invoice of October 4.
Remitted our check for $901.87 to the Gibralter Company in payment of our note due today, with interest.
17—*Bought merchandise from Smith and Brown, $900.00; their invoice No. 963, dated October 16. Terms, 1½ 10, n 30.
*Sold on account of L. F. Kuhl, $1,300.00; invoice No. 8.

Oct 18—*L F Kuhl returned $25.00 of rain-damaged merchandise for credit we issued credit memo No 2 to apply on our invoice of October 15

Paid freight as follows

Freight in	$25.00
Freight out	30.00

Paid the $450.00 invoice of Smith and Brown of October 8 less return of $25.00 and less 1½% discount

19— Cash sale of merchandise $75.00

*Willis Roberts purchased merchandise in the amount of $1 300.00 invoice No 9

Roberts gave us his 10-day 6% note for $1 300.00 in payment of this invoice

Cash purchases $3 000.00

20— L M Custer paid our invoice of October 8 less 2% discount Since the check was received too late Custer is not entitled to the discount The bank charged an exchange fee of $.20 on this check

Sold merchandise for cash $300.00

Willis Roberts check for $684.50 was received in full payment of our invoice of October 10 less discount of 1½% and less freight ($5.00) paid by him We had previously agreed that the freight was to be paid by him and deducted when he made his remittance

Paid the Gibralter Company for our note due today

Face of note	$500.00
Interest for 15 days	1.25
Total	$501.25

22—*George Vanlin sold us merchandise on account $800.00 invoice No 502 dated October 19

*Sold $900.00 of merchandise to Willis Roberts our invoice No 10

Willis Roberts gave us his 15-day non interest note for $900.00 in payment of our invoice of today

Cash purchase of merchandise $300.00

Charles D Weeks gave us his check in payment of our invoice of October 12 less 2% discount

Cash purchase of merchandise $250.00

We sent our check for $394.00 to Smith and Brown in payment of their invoice of October 12 less 1½% discount

23— Paid Carpenter & Co $4 008.33 for the note issued October 8 and interest at 5%

*Sold to L F Kuhl on account $400.00 invoice No 11

Cash sale of merchandise $90.00

24—*Received merchandise on account from Carpenter & Co $1 300.00 their invoice No 680 dated October 23

*Sold $900.00 of merchandise to L M Custer invoice No 12

L M Custer gave us his 15-day 6% note for the amount of today's invoice

25— We received a check for $13.20 from Gibralter Company in payment of the debit balance in their account

Received L F Kuhl's check for invoice of October 15 less $25.00 return of October 18 and less discount of 1½% on net amount

Oct. 25— Paid advertising bill of $13.50.

*Arthur Cox purchased merchandise in the amount of $800.00 on account; our invoice No. 13.

26— Paid Smith and Brown their invoice of October 16, less 1½%.

Collected the Kuhl note, $800.00.

*Received credit memo No. 108 from Carpenter & Co. for $20.00 for return of damaged goods shipped to us on their invoice of October 23.

27— Paid freight on merchandise purchased, $5.00.

Received L. F. Kuhl's check in payment of our invoice of October 17, less discount of 2%.

*Sold merchandise to Charles D. Weeks on account, $500.00; invoice No. 14.

Received a 30-day, non-interest note from Weeks for the above sale.

*Received merchandise on account from Philip Winthrop, $700.00; his invoice No. 312, dated October 27.

Purchased merchandise for cash, $600.00.

29— Gave the bank our check for $5,000.00 and a new $2,500.00, 30-day note in payment of our note due yesterday. Paid the $12.50 discount on the new note in cash.

Willis Roberts paid cash in full settlement of his note of October 19, plus interest.

*Sold merchandise on account to Charles D. Weeks, $600.00; our invoice No. 15.

30—*Issued credit memo No. 3 to Willis Roberts for unsalable merchandise, $15.00.

Paid $800.00 to George Vaulin in full settlement of our account with him.

31— Paid salesmen's salaries, $400.00.

After the postings are completed, take a trial balance.

Problems—Group B

Problem B-1. For this problem you will require a cash receipts book with the following money columns:

Credit:
- Sundry
- Sales
- Interest Income

Debits:
- Freight Out
- Collection and Exchange
- Interest Expense
- Discount on Sales
- Cash

Record the following transactions:

Aug. 3—Sold merchandise for cash, $325.00.

5—Collected $519.00 from Joshua Berger on account.

8—Collected a note receivable from Hubert Sanders, $700.00.

10—Discounted a $6,000.00 note at bank. Proceeds $5,940.00.

Aug 13—Collected a $600 00 account from B E Pangburn, as follows

Account	$600 00
Less cash discount	12 00
Net	$588 00

15—Collected a $750 00 account from J D Dutton, as follows

Account	$750 00
Less freight paid by Dutton for us	14 00
Cash	$736 00

17—Collected a $1,200 00 note from George Bailey, with $6 00 interest
19—Sold merchandise for cash, $125 00
20—The bank notified us that it had collected from K H Ruggles a note which we had left with it for collection Face of note, $2,000 00, interest $20 00 exchange fee, $1 00
22—Collected an account from N M Waters, as follows

Account	$900 00
Less cash discount	18 00
Net	$882 00
Less freight paid for us	13 50
Remittance	$868 50
Exchange charged by bank on check received	15
Net cash	$868 35

After recording the transactions, foot the cash receipts book and prove the equality of the debits and credits

Problem B-2 Record the transactions of Problem B 1 in cash books and journal of the form illustrated in Chapter 8

Problem B-3 For this problem you will require a cash disbursements book with the following money columns

Debits
- Sundry
- Collection and Exchange
- Purchases
- Freight In
- Freight Out
- Interest Expense

Credits
- Discount on Purchases
- Cash

Record the following transactions

Sept. 2—Cash purchase of merchandise $1,250 00
4—Paid freight in, $12 50
7—Paid Griswold Brothers for their invoice No 231, $650 00
9—Sent a bank draft to Sam Waterbury for $605 00 The bank charged an exchange fee of $ 20 The draft was in payment of Waterbury's invoice No 426

Sept. 11—Paid freight in, \$23.19, and freight out, \$19.22.
17—Cash purchase of merchandise, \$923.50.
22—Paid \$500.00 to George Duncan, in settlement of our note.
24—Paid Fred Smith's invoice No. 1574, in the amount of \$845.00, less 2% cash discount.
25—Paid \$603.00 to L. B. Voss, in settlement of our \$600.00 note and interest.
27—Sent a bank draft to P. W. Ruth in payment of his invoice No. 291, for \$950.00 less 1% cash discount. The bank charged an exchange fee of \$.25 for the draft.

After recording the transactions, foot the cash disbursements book and prove the equality of the debits and credits.

Problem B-4. Refer to the transactions in Problem B-3. Record these transactions in a one-column cash disbursements book and a journal.

Problem B-5. West and Mather, Inc. operate a real estate and insurance office. They have numerous transactions of the following nature:

Oct. 1—Collected \$400.00 rent on an apartment in a building owned by J. G. Westerman and managed by the company. The management contract provides that West and Mather, Inc. are to retain 5% of rent collections as rental commission income.
3—Collected a commission of \$1,000.00 for selling a piece of real estate for T. B. Kennedy.
5—The company acts as an agent for Old Reliable Insurance Company in loaning money to property owners, secured by mortgages. It receives a commission of 2% on all mortgages placed. Today it collected a commission of \$120.00 for making a mortgage loan to C. V. Putnam.
7—The company also receives a commission of 2% of all collections of principal and interest on such mortgages as compensation for servicing the mortgages. Today it collected \$75.00 interest on a mortgage.
9—The company also acts as an agent in placing insurance; for this service, it receives a commission of 15% of the premiums collected. Today the company collected a premium of \$150.00 on a policy written with Safety Insurance Company.
10—The company also occasionally finds it necessary to borrow money at the bank by discounting its notes payable. Today it discounted a \$5,000.00, 60-day note, at 6%.

Rule up a columnar cash receipts book in a form which you believe will be convenient, bearing in mind that the company desires to keep a separate account with each class of income. Record the above-mentioned transactions in the cash receipts book.

ASSIGNMENT MATERIAL FOR CHAPTER 10

Questions

1. What are some of the advantages of controlling accounts?

2 If controlling accounts are kept, why is it desirable to have special columns for them in the books of original entry?

3. Before posting the column totals of a book of original entry, what should be done to check the correctness of these totals?

4. Assume that a cash receipts book contains a special Accounts Receivable controlling account column, state the procedure for making postings from it.

5. What is the procedure for proving subsidiary ledgers?

6. If the journal were not provided with special controlling account columns for Accounts Receivable, and you wished to credit J. S Smith, a customer, for a note received from him, how would the credit entry be posted?

7. Under what circumstances would you suggest having an Accounts Receivable debit column in the cash disbursements book?

8. If you were designing a system of accounts, what facts would influence you in deciding what controlling accounts should be used?

Problems—Group A

Problem A-1. Record the following transactions of Abbott Corporation in the cash books and journal provided in the laboratory material Sales, returned sales and allowances, purchases, and returned purchases and allowances are not stated in the list of transactions, they have been recorded by your assistant

Make all postings except column totals daily, post column totals at the end of the month.

Take a trial balance of the general ledger and prepare schedules of the subsidiary ledgers

Apr. 1—Issue capital stock for cash, \$25,000 00
Cash purchase of merchandise, \$10,000 00.
2—Pay rent for the month, \$250 00.
4—Pay advertising, \$60 20.
6—Receive from Charles Lyons a 10-day note without interest for \$580 00, the amount of the sale to him today.
8—Give Frank Howard a 15-day, non-interest note for amount of purchase today, \$620 00.
11—Collect \$375 00 from Fred Madison in payment of our invoice No 1.
13—Receive a 15-day, non-interest note from Fred Madison for \$400 00, the amount of today's sale to him.
15—Collect from Herman Moore for our invoice No. 2, \$690 00, less our credit memo No. 1, \$40 00.
16—Collect \$580 00 from Charles Lyons in payment of his note
17—Receive cash from John Magee in payment of our invoice No. 4, \$615 00, less 2% cash discount.

Apr. 17—Send O. E. Peterman a check for our purchase of April 5, $895.00, less 2% discount.

19—O. E. Peterman wrote us that the remittance we sent him on April 17 was received too late to entitle us to the discount.

20—On April 8 we sold goods to John Magee on account. On April 17 we collected for this sale, less 2% cash discount. Today Magee returned goods billed to him at $100.00; a credit memo for that amount was issued to him, and recorded in the returned sales and allowances book. Since Magee took a 2% cash discount when he paid for the invoice, he should have been credited with only $98.00 when he returned the goods. Magee has been notified that the credit memo should have been for only $98.00. Make a journal entry for the $2.00 correction.

22—Collect from John Doty the amount of our invoice No. 6, $750.00, less 2% cash discount.

23—Pay Albert Steggal for purchase of April 13, $395.00, less 1% cash discount.

Pay note to Frank Howard, $620.00.

24—Collect from Herman Moore for our invoice No. 7, $470.00, less 2% cash discount.

Receive a 30-day, non-interest note from John Doty for $725.00, the amount of the sale to him today.

25—Pay Albert Steggal for merchandise purchased April 3, $479.70.

Pay Maurice Hancock amount of invoice No. 1962 purchased April 17, $400.00, less credit memo of April 20, $12.00, and less cash discount of 1%.

26—Pay John Magee the $98.00 credit balance in his account.

Give Albert Steggal a 30-day, 6% note for $195.00, the amount of our purchase from him today.

27—Issue a check to Frank Howard for amount of invoice of April 18, $627.80.

28—Fred Madison dishonored his $400.00 note due today.

29—Pay O. E. Peterman $277.20, for his $280.00 invoice of April 19, less 1% cash discount.

30—Collect from Frank Howard the amount of the credit memo issued by him, and recorded April 29.

Receive a check for $965.30 from Charles Lyons, in payment of our invoice No. 8. Since the check was received after the discount period had expired, the $19.70 discount is not allowed.

Pay salesmen's salaries, $620.00.

Problem A-2. This problem illustrates controlling accounts as well as the use of special columns in the cash books.

Entries for sales, returned sales and allowances, purchases, and returned purchases and allowances have been made by your assistant. You are to make entries in the cash books and journal.

Make all postings. Prepare a trial balance of the general ledger, and schedules of the subsidiary ledgers.

Aug. 1—Issued capital stock for cash, $25,000.00.

Purchased a complete stock of merchandise for cash, $15,000.00.

Purchased store equipment for cash, $1,800.00.

Paid store rent for month, $300.00.

2—Sale to Robert Dennis on account, $830.00.

Purchased merchandise from Babcock & Co., $1,800.00; their invoice August 1.

Aug 2—Gave Babcock & Co our 15-day, 6% note for amount of today's purchase
3—Sale to H E Canfield, $900 00
Received a 20-day, 6% note from H E Canfield for amount of sale today
4—Purchased merchandise from Davenport, Inc, $760 00, their invoice August 3
Paid advertising, $285 00
5—Sale to Roy Porter $500 00
Received a 30-day, 6% note from Porter for the amount of the sale today
6—Issued a credit memo to Robert Dennis, $22 50
Cash sale of merchandise, $110 00
Discounted our 30-day note for $6 000 00 at First National Bank Discount rate, 6%
8—Sale to James Edmunds on account, $946 00
Paid freight in, $72 50, and freight out, $31 75
9—Sale to Paul Hurd, $1,200 00
Received a 20-day, 6% note from Hurd for the amount of today's sale
10—Purchased merchandise on account from French and French, $1,100 00, their invoice August 9
11—Sale to Paul Hurd on account, $1,275 00
12—Sale to H E Canfield on account, $815 00
Cash purchase of merchandise, $420 00
13—Issued credit memo for $18 00 to James Edmunds
Sent a check to Davenport, Inc, for the $760 00 purchase of August 4, less 2% discount
15—Sale on account to Roy Porter, $680 00
16—Received credit memo 137 for $30 00 from French and French to apply against purchase on August 10
Purchase on account from Globe Corporation, $950 00, their invoice dated August 14
17—Collected from James Edmunds for $946 00 sale on August 8, less credit memo issued on August 13, and less 2% cash discount
Paid the $1,800 00 note given to Babcock & Co on August 2, and interest
18—Paid French and French for $1,100 00 purchase on August 10, less $30 00 credit memo and less 2% cash discount
Cash sale $310 00
19—Purchase from Davenport, Inc, $1,000 00, their invoice dated August 17
Gave Davenport, Inc, our 30-day, 6% note for $1,000 00
20—Collected from Paul Hurd for sale of August 11, less 2% cash discount
22—Sale to Herbert Ryan on account, $263 00
23—Collected the Canfield note, $900 00, received August 3, and interest
Paid Globe Corporation for purchase of August 16, less 2% cash discount
24—Collection from Roy Porter for sale on August 15, $680 00, less $13 00 freight paid for our account, and less 2% cash discount
Purchase from Babcock & Co $1,390 00 their invoice dated August 23
25—Collected $830 00 from Robert Dennis for our invoice No 1 Dennis forgot to deduct the $22 50 credit memo issued on August 6, we notified him of this fact
26—Received a check from H E Canfield for $798 70 the amount of the sale on August 12, less 2% discount The discount was not allowed The bank charged $ 25 exchange on the check
27—Sale to James Edmunds on account, $312 00
Purchase from French and French, $2,297 00, their invoice August 25

Aug. 29—In accordance with his request, we sent Robert Dennis \$22.50, the amount of the credit memo sent him on August 6, and not deducted by him when making his remittance on August 25.

Paul Hurd dishonored the 6% note he gave us on August 9.

30—Received credit memo C202 from Babcock & Co. for \$65.00 to apply against purchase on August 24.

Paid freight in, \$32.70, and freight out, \$26.80.

31—Paid office salary, \$200.00.

Problems—Group B

Problem B-1. A bookkeeper drew off the following general ledger trial balance and schedules of subsidiary ledgers. You will note that the trial balance does not balance, and that the schedules of accounts receivable and accounts payable do not agree with their respective controls.

On the following pages you will find the books of original entry and the ledgers. Make a list of the errors and prepare a trial balance of the general ledger and schedules of the subsidiary ledgers showing what the balances in the accounts in the three ledgers would have been if the books had been kept correctly.

You are not required to correct the books.

See page 132 for procedures to be followed. Get the general ledger into balance before working on the subsidiary ledgers.

General Ledger Trial Balance
November 30, 19—

Cash	8,087.91	
Accounts Receivable	1,392.26	
Accounts Payable		1,375.06
Capital Stock		10,000.00
Sales		2,430.17
Returned Sales and Allowances	34.70	
Purchases	5,279.18	
Returned Purchases and Allowances		54.95
Store Rent	200.00	
Discount on Purchases	41.70	
Discount on Sales		16.93
	15,040.75	13,877.11

Schedule of Accounts Receivable
November 30, 19—

F. C. Cole	306.06
J. B. Maxwell	173.75
John Moore	397.26
Harry Paine	212.01
Total	1,089.08

Schedule of Accounts Payable
November 30, 19—

Martin Bailey	196.06
Fred Hamilton	916.70
D. R. Murphy	208.60
Total	1,321.36

Sales Book (Page 1)

Date		√	Name	Invoice No	Amount
19—					
Nov	5	√	J B Maxwell	1	255 30
	6	√	John Moore	2	398 63
	11	√	F C Cole	3	306 06
	15	√	Harry Paine	4	276 95
	18	√	F C Cole	5	326 19
	23	√	J B Maxwell	6	163 27
	25	√	Harry Paine	7	207 51
	29	√	John Moore	8	397 76
					2 340 17
					(2) (7)

Purchase Book (Page 1)

Date		√	Name	Date of Creditor's Invoice	Amount
19—					
Nov	3	√	Martin Bailey	Nov 1	1,255 75
	6	√	F E. Cooper	5	962 87
	13	√	D R. Murphy	12	875 20
	16	√	F E. Cooper	15	726 95
	19	√	Fred Hamilton	18	647 90
	23	√	Martin Bailey	22	196 06
	25	√	D R. Murphy	23	316 80
	29	√	Fred Hamilton	27	257 65
					5,279 18
					(9) (4)

Returned Sales and Allowances Book (Page 1)

Date		√	Name	Credit Memo No	Amount
19—					
Nov	7	√	J B Maxwell	1	1 75
	22	√	John Moore	2	31 15
	30	√	Harry Paine	3	4 50
					37 40
					(8) (2)

Returned Purchases and Allowances Book (Page 1)

Date		√	Name	Explanation	Amount
19—					
Nov	24	√	Fred Hamilton	Cr memo 217F	18 75
	27	√	D R. Murphy	Cr memo 202	36 20
					54 95
					(4) (10)

Cash Receipts Book (Page 1)

Date		Account Credited	Explanation	Credits: General Ledger L.F.	Credits: General Ledger Amount	Credits: Accounts Receivable ✓	Credits: Accounts Receivable Amount	Debits: Discount on Sales	Debits: Cash
19—									
Nov.	1	Capital Stock		6	10,000 00				10,000 00
	13	J. B. Maxwell	Invoice 1			✓	263 55	5 27	258 28
	19	F. C. Cole	Invoice 3			✓	306 06	6 12	299 94
	21	Notes Receivable	John Moore	3	398 63				389 63
	21	Harry Paine	Invoice 1			✓	276 95	5 54	271 41
	29	F. E. Cooper	For freight. See journal.	✓/4	6 25				6 25
					10,404 88		856 56	16 93	11,225 51
							(2)	(14)	(1)

Cash Disbursements Book (Page 1)

Date		Account Debited	Explanation	Debits: General Ledger L.F.	Debits: General Ledger Amount	Debits: Accounts Payable ✓	Debits: Accounts Payable Amount	Credits: Discount on Purchases	Credits: Cash
19—									
Nov.	1	Store Rent		11	200 00				200 00
	11	Martin Bailey	Purchase, Nov. 3			✓	1,265 75	12 66	1,253 09
	18	Freight In	On Nov. 16 purchase from Cooper	12	6 25				6 25
	19	Purchases	Cash purchase		100 00				100 00
	22	D. R. Murphy	Purchase, Nov. 13			✓	875 20	17 50	857 70
	24	John Moore	For credit memo 2			✓	31 15		35 15
	26	F. E. Cooper	Invoice, Nov. 16			✓	726 95	14 54	712 11
					306 25		2,899 05	44 70	3,161 60
							(4)	(16)	(1)

Journal

(Page 1)

Accounts Receivable	Accounts Payable	General Ledger	Date	L F		General Ledger	Accounts Payable	Accounts Receivable
			19—					
		398 63	Nov 6	3	Notes Receivable			
				✓	John Moore			398 63
					15-day note for invoice No 2			
	962 87		6	✓	F F Cooper			
				5	Notes Payable	962 87		
					30-day note for purchase today			
	6 25		27	✓	F E Cooper			
				12	Freight In		6 25	
					The freight paid on Nov 18 should have been charged to Cooper since the freight terms were f o b destination The freight should have been deducted when computing our remittance of Nov 26 Since we have paid the invoice to which the freight applied we are asking Cooper to reimburse us			
	969 12	398 63				962 87	6 25	398 63
	(4)						(4)	

GENERAL LEDGER

Cash (Page 1)

19—					19—				
Nov.	30	8,087.91	CR1	11,252.51	Nov.	30		CD1	3,161.60

Accounts Receivable (Page 2)

19—					19—				
Nov.	30	1,392.26	S1	2,310.17	Nov.	30		RS1	37.10
						30		RP1	54.95
						30		CR1	856.56
									948.91

Notes Receivable (Page 3)

19—					19—				
Nov.	6	Moore—15 da.	J1	398.63	Nov.	21	Moore	CR1	398.63

Accounts Payable (Page 4)

19—					19—				
Nov.	29		CR1	6.25	Nov.	30		P1	5,279.18
	30		CD1	2,899.05		30	1,375.06	J1	6.25
	30		J1	969.12					5,285.43
	30		RP1	45.95					
				3,910.37					

Notes Payable (Page 5)

					19—				
					Nov.	6	Cooper	J1	962.87

Capital Stock (Page 6)

					19—				
					Nov.	1		CR1	10,000.00

Sales (Page 7)

					19—				
					Nov.	30		S1	2,430.17

Returned Sales and Allowances (Page 8)

19—									
Nov.	30		RS1	37.10					

Purchases (Page 9)

19—									
Nov.	30		P1	5,279.18					

Returned Purchases and Allowances (Page 10)

					19—				
					Nov.	30		RP1	54.95

Store Rent (Page 11)

19—									
Nov.	1		CD1	200.00					

Freight In (Page 12)

19—					19—				
Nov.	18		CD1	6 25	Nov	27		J1	6 25

Discount on Purchases (Page 13)

					19—				
					Nov	30		CD1	44 70

Discount on Sales (Page 14)

19—									
Nov	30		CR1	16 93					

ACCOUNTS RECEIVABLE LEDGER

F. C Cole

19—						
Nov	11		S1	306 06		306 06
	18		S1	326 19		632 25
	19		CR1		306 06	326 19

J B Maxwell

19—						
Nov	5		S1	265 30		265 30
	7		RS1		17 50	247 80
	13		CR1		258 28	10 48 Cr
	23		S1	163 27		173 75

John Moore

19—						
Nov	6		S1	398 63		398 63
	6		J1		398 63	—
	22		RS1		31 15	31 15 Cr
	24		CD1	31 15		—
	29		S1	397 26		397 26

Harry Paine

19—						
Nov	15		S1	276 95		276 95
	24		CR1		276 95	—
	25		S1	207 51		207 51
	30		RS1	4 50		212 01

ACCOUNTS PAYABLE LEDGER

Martin Bailey

19—						
Nov	3		P1		1,265 75	1,265 75
	11		CD1	1,265 75		—
	23		P1		196 06	196 06

F. E. Cooper

19—						
Nov.	6		P1		962 87	962 87
	6		J1	962 87		—
	16		P1		726 95	726 95
	26		CD1	726 95		—
	27		J1	6 25		6 25 Dr.
	29		CR1		6 25	—

Fred Hamilton

19—						
Nov.	19		P1		647 90	647 90
	24		RP1	18 75		629 05
	29		P1		287 65	916 70

D. R. Murphy

19—						
Nov.	13		P1		875 20	875 20
	22		CD1	875 20		—
	25		P1		316 80	316 80
	27		RP1	36 20		280 60

ASSIGNMENT MATERIAL FOR CHAPTER 11

Questions

1 Distinguish between accrued expense and deferred expense

2 Distinguish between accrued income and deferred income

3 State as to each of the following whether it is accrued or deferred expense, or accrued or deferred income

(a) Advertising expense paid for six future months
(b) Interest paid to maturity on a note payable which is not due for two months
(c) Taxes for the period which are not due for three months
(d) Rent earned but not due for two weeks
(e) Collections received in advance for services to be rendered in the future

4 In connection with the closing of the books what three journal entries are made with respect to each income or expense account affected by a deferred or an accrued item?

5 Where should accrued and deferred items be classified in the balance sheet?

6 Deferred expenses usually are not realizable in cash then why should they be shown on the asset side of the balance sheet? Similarly deferred income does not represent a liability payable in cash, then why should it be shown on the liability side of the balance sheet?

7 Where should the following be classified in the balance sheet?

(a) Accrued taxes
(b) Advertising expense paid in advance
(c) Accrued interest receivable
(d) Rent collected in advance

8 Ignoring deferred and accrued items when the books are closed at the end of 1948 will cause misstatements of the net income of both 1948 and 1949 Complete the following chart

	Net Income 1948	Net Income 1949
Deferred charge ignored	Understated	Overstated
Deferred income ignored		
Accrued expense ignored		
Accrued income ignored		

9 Ignoring deferred and accrued items will also affect the balance sheet prepared at the end of the period Complete the following chart

	Balance Sheet December 31 1948		
	Assets	Obligations	Surplus
Deferred expense ignored	Understated		Understated
Deferred income ignored			
Accrued expense ignored			
Accrued income ignored			

Problems—Group A

Problem A-1. The Dugan Store closes its books at the end of each month. Its three clerks are paid $27.00 each per week; payment is made every Saturday evening.

The last Saturday of November fell on the 28th. Give the adjusting, closing, and reversing entries required in connection with the closing as of November 30. Submit the Accrued Salaries Payable and the Clerks' Salaries accounts. Compute the accrual on the basis of a work week of six days.

Problem A-2. From the following information, prepare the adjusting, closing, and reversing journal entries at the end of the year.

Henry Olsen bought two fire insurance policies during the year. One policy, with a term of three years, was purchased on April 1 at a premium cost of $250.00. The other policy, with a one-year life, was purchased on September 1 at a premium cost of $150.00. Olsen's books are to be closed on December 31.

Show the Insurance account and the Unexpired Insurance account.

Problem A-3. On December 16, T. L. Bank rented office space to James Kelly at $100.00 per month, and collected $150.00, which paid the rent to the end of January. Bank closes his books on December 31. Prepare the adjusting, closing, and reversing entries to be made by Bank in connection with this matter. Show the Rent Income account and the Rent Collected In Advance account.

Problem A-4. T. H. Haskell, Inc., held a considerable number of notes receivable on which the company had collected, during the year, $542.00 in interest. On December 31 interest had accrued but had not been collected on the following notes:

Maker	Face of Note	Interest Rate	Date of Note
F. F. Blair	$1,000.00	5%	December 1
C. D. Hall	2,000.00	6	December 16
O. A. Rounds	1,500.00	6	November 1

Prepare the adjusting, closing, and reversing entries incident to closing the books on December 31. Submit the Interest Income and Accrued Interest Receivable accounts as they would appear in the ledger.

Problem A-5. The trial balance of the Towner Company on December 31 appeared as follows:

Accounts Receivable	4,200.00	
Accounts Payable		1,502.30
Advertising	80.00	
Cash	5,300.50	
Capital Stock		10,000.00
Commission Income		312.70
Delivery Equipment	1,200.00	
Delivery Expense	97.45	
Dividends	150.00	
Furniture and Fixtures	900.00	
Insurance	300.00	
Interest Expense	75.00	
Interest Income		100.00
Inventory (November 30)	1,000.00	

Notes Receivable	3,200 00	
Notes Payable		2,500 00
Office Expense	60 00	
Office Salaries	350 00	
Purchases	8,500 00	
Purchase Returns and Allowances		300 00
Rent	200 00	
Sales		9 000 00
Sales Returns and Allowances	315 35	
Store Salaries	400 00	
Surplus (November 30)		2 622 30
	26 337 30	26 337 30

Prepare adjusting journal entries for the following matters

(a) Accrued store salaries, $50 00
(b) Unexpired insurance, $150 00
(c) Accrued interest on notes receivable, $10 00
(d) Accrued interest on notes payable, $7 90
(e) Oil on hand for use in delivery truck, $8 50
(f) Prepaid interest on notes payable, $7 20
(g) Commissions collected in advance, $3 25

The merchandise inventory on December 31 was $2,130 00

Complete the working papers, prepare a statement of profit and loss, a statement of surplus, and a balance sheet

Prepare the December 31 closing entries and the reversing entries required on January 1

Take a trial balance after posting the reversing entries.

Problems—Group B

Problem B-1. A magazine publishing company credits a Subscription Income account with all subscriptions collected Subscriptions taken in January are regarded as beginning with the February issue, and are therefore regarded as 11/12 earned at the end of the year The same theory is applied to subscriptions taken in subsequent months The Subscription Income account at the end of a year appears as follows

Subscription Income

					19—			
					Jan.	1	Deferred	101,400 00
					Jan.		Total collections	18 000 00
					Feb		" "	19 440 00
					Mar		" "	18,720 00
					Apr		" "	21 960 00
					May		" "	24 120 00
					June		" "	22,680 00
					July		" "	20 520 00
					Aug		" "	17,640 00
					Sept.		" "	18 360 00
					Oct		" "	19,800 00
					Nov		" "	21 240 00
					Dec		" "	22 320 00

Prepare a schedule showing your computation of the unearned subscription income.

Submit the adjusting entry and the closing entry.

Problem B-2. A company insured its property under three-year policies purchased as shown below:

Date	Premium
January 1	$120.00
March 1	60.00
July 1	360.00
December 1	240.00

Submit adjusting, closing, and reversing entries as of the end of the year.

Problem B-3. The balance in the Interest Expense account on December 31 is $925.75. On December 2, the company discounted at bank its 90-day note payable for $30,000.00; the discount rate was 6%. On December 15, the company gave a creditor its 6% note for $24,000.00, due in 60 days.

Make adjusting, closing, and reversing entries as of the end of the year.

Problem B-4. Bert Bailey operates a summer resort. The resort opened in June. On June 30 the balance in his Income from Guests account was $1,213.50. On June 16, Hubert Hale rented a cottage for a month, on a lease expiring July 15, and paid a month's rent in advance, $180.00. On June 21, Robert Morris rented a cottage for a month, on a lease expiring July 20, at $175.00, payable at the end of the month.

Make the adjusting, closing, and reversing entries for Bailey as of the end of June.

Problem B-5. The trial balance of The T. L. Hagen Corporation on December 31, 19—, appears below:

Cash	6,750 00	
Accounts Receivable	5,000 00	
Notes Receivable	3,500 00	
Inventory (November 30)	2,000.00	
Office Equipment	750.00	
Accounts Payable		2,800.00
Notes Payable		5,000.00
Capital Stock		7,500.00
Surplus		1,190.00
Sales		29,000.00
Returned Sales and Allowances	900.00	
Purchases	25,000.00	
Returned Purchases and Allowances		500.00
Advertising	400.00	
Salaries of Salesmen	800.00	
Insurance	250.00	
Miscellaneous General Expense	375.00	
Interest Income		125.00
Interest Expense	90.00	
Dividends	300 00	
	46,115 00	46,115 00

Adjustments are required for the following accrued and deferred items:

(a) Unpaid rent for December, $150 00
(b) Unpaid salesmen's salaries, $125 00
(c) Unexpired insurance, $225 00
(d) Accrued interest on notes receivable, $30 00
(e) Accrued interest on notes payable $25 00
(f) The company discounted a note at the bank, the discount deducted by the bank was charged to Interest Expense $20 00 of this charge should be deferred

The inventory on December 31 was $1,750 00
Prepare working papers

ASSIGNMENT MATERIAL FOR CHAPTER 12

Questions

1. Is the balance sheet a statement of fact or opinion? Is the statement of profit and loss a statement of fact or opinion? Give reasons.

2. Distinguish between real, nominal, and mixed accounts.

3. Adjusting entries may be made for the following classes of items:

Accrued expenses.
Accrued income.
Deferred expenses.
Deferred income.
Bad debts.
Depreciation.

Which of these adjusting entries are reversed?

4. The Insurance account is a mixed account if its balance includes any unexpired premiums. After the adjusting entry transferring the unexpired insurance to an Unexpired Insurance account has been posted:

Is the Insurance account real, nominal, or mixed?
Is the Unexpired Insurance account real, nominal, or mixed?

5. Distinguish between the Reserve for Bad Debts account and the Bad Debts account. How should each be classified in the balance sheet or statement of profit and loss?

6. Why are accounts receivable not charged directly to an expense account when they are found to be worthless, instead of being charged to a Reserve for Bad Debts?

7. The account receivable of F. K. Jones, amounting to \$85.00, is considered worthless. Give the journal entry to write it off.

8. The trial balance of the *X* Company on July 31, before the books were closed for the month, was, in part, as follows:

Accounts Receivable	\$35,000.00	
Reserve for Bad Debts.		\$ 800.00
Sales		50,500.00
Returned Sales and Allowances	500 00	

The \$800.00 in the Bad Debt Reserve is the balance remaining from credits in previous months.

The company provides for bad debt losses by monthly charges of 2% of net sales. Make the July 31 adjustment for bad debts.

What amount will appear in the statement of profit and loss as the bad debt expense for July, and where will it be shown? How will the accounts receivable be shown in the balance sheet for July 31?

9. The trial balance of the *Y* Company on December 31, before the books were closed for the year, contained the following items (among others):

Accounts Receivable.	\$75,000.00	
Reserve for Bad Debts.		\$2,100.00

After a careful study of the open accounts was made it was estimated that the total loss to be incurred in collecting the accounts would not exceed $2 750 00 Make the December 31 adjustment for bad debts

What amount will appear in the statement of profit and loss as the bad debt expense for the year and where will it be shown? How will the accounts receivable be shown in the December 31 balance sheet?

10 After adjustments for bad debt losses were made the trial balance of a certain company contained the following balances on December 31

Accounts Receivable	$75 000 00	
Reserve for Bad Debts		$3 500 00
Bad Debts	2 500 00	

Why is the credit balance of the reserve greater than the debit balance in the Bad Debts account?

In which statement (balance sheet or statement of profit and loss) will the balance of the Reserve for Bad Debts be shown? In which statement will the balance of the Bad Debts account be shown?

Which account will be closed to Profit and Loss when the books are closed?

11 A company s trial balance at the end of 1948 contained the following items

Buildings	$50 000 00	
Reserve for Depreciation—Buildings		$6 000 00

Depreciation of the buildings is provided for at the rate of 4% a year No provision has yet been made for 1948

Make the journal entry providing for the depreciation of buildings for 1948

After this entry is posted what will be the balances in the following accounts?

Buildings
Reserve for Depreciation—Buildings
Depreciation Buildings

How will these account balances be used in preparing the statements for the year?

12 What entries should be made with respect to a fixed asset which has been fully depreciated in the accounts?

13 If an asset has been fully depreciated on the books but is still in use by the business what is indicated with reference to the profits shown by the books in prior periods?

14 How should depreciation and bad debt charges be classified in the statement of profit and loss?

15 Depreciation reserves and the reserve for bad debts normally have credit balances Then why are they not shown on the right side of the balance sheet where other accounts with credit balances are shown?

16 Why not deduct the total of all the depreciation reserves from the total of the balances of the fixed asset accounts in the balance sheet instead of going to the trouble of itemizing the reserves and making individual deductions?

17 The Small Tools account has a debit balance of $4 215 60 an inventory shows that the small tools on hand have a depreciated value of $3 265 75 Make the journal entry to record depreciation of the small tools

Problems—Group A

Problem A-1. The trial balance of Blue Star Corporation as of December 31, 19— will be found in the laboratory material. Make the necessary adjusting entries for accrued and deferred items and for reserves. Letter the adjusting entries to correspond with the information set out below. In addition, prepare working papers, statement of profit and loss, statement of surplus, balance sheet, and closing entries.

(a) Depreciation of store building	3%
(b) Depreciation of store equipment	10%
(c) Depreciation of delivery trucks	25%
(d) Depreciation of furniture and fixtures	$8\frac{1}{2}$%
(e) Accrued salesmen's salaries	$200.00
(f) Accrued office salaries	70.00
(g) Accrued interest on notes payable	72.00
(h) Prepaid store rent	50.00
(i) Accrued taxes	100.00
(j) Inventory of office supplies	30.00
(k) Unexpired insurance	50.00
(l) Interest accrued on notes receivable	20.00
(m) Stationery and postage unused	150.00
(n) Collection of rental income in advance . .	75.00
(o) The reserve for bad debts should be credited with $\frac{1}{2}$ of 1% of the net sales.	
(p) Interest paid in advance on notes payable	15.00
(q) Mortgage interest is payable on March 31 and September 30. Interest has been paid to the latter date.	
(r) Prepaid advertising..	150.00

The inventory on December 31, 19— was valued at $35,000.00.

Do not make the reversing journal entries; however, indicate (by the reference letters) which journal entries should be reversed on January 1.

Problems—Group B

Problem B-1. A trial balance contains the following balances on December 31:

Accounts Receivable..................	$35,687.55	
Reserve for Bad Debts.......		$ 928.50
Sales...		415,783.24
Returned Sales and Allowances..	3,215.22	

(a) The amount to be added to the reserve is ¾ of 1% of the net sales. Give the journal entry for the addition to the reserve, and show how the accounts receivable should appear in the balance sheet.

(b) The reserve is to be increased to $4,000.00, the estimated amount of bad debt losses. Give the journal entry for the addition to the reserve, and show how the accounts receivable should appear in the balance sheet.

Problem B-2. (a) A trial balance contains the following balances:

Accounts Receivable	$29,645.87	
Reserve for Bad Debts............. . .		$1,823.56

Show how the accounts receivable should appear in the balance sheet.

(b) A $215 67 account receivable from Horace Bradley is determined to be uncollectible and is to be written off Make the journal entry to write off this account and show how the accounts receivable should appear in the balance sheet

Problem B-3. A trial balance contains the following balances

Machinery and Equipment	$35,625 75	
Reserve for Depreciation—Machinery and Equipment		$9 682 57

The debit balance of the asset account includes the cost, $2,000 00, of a machine which has been fully depreciated Make the journal entry to write off this fully depreciated asset

Problem B-4 A company prepared a profit and loss statement at the end of its first year of operations, which showed a net profit of $13,274 86 The bookkeeper failed to give consideration to the following matters

Depreciation of building	$1,215 00
Depreciation of delivery equipment	400 00
Provision for bad debts	1,175 00
Unexpired insurance	210 00
Accrued taxes	367 00
Accrued interest on notes receivable	25 00
Rent collected in advance	200 00

Determine the correct net profit after making the adjustments

Problem B-5 At the end of the second year of the life of The *X* Company, the attention of the bookkeeper was called to the fact that he had not given recognition to the following matters when closing the books

	At the End of	
	First Year	Second Year
Depreciation		
Buildings	$ 1,000 00	$ 1,000 00
Furniture and fixtures	300 00	325 00
Reserve for Bad Debts—Balance required at year end	725 00	890 00
(Bad debts charged to Bad Debts expense account first year $295 00 second year, $983 00)		
Unexpired insurance	325 00	245 00
Accrued interest on notes receivable	45 00	75 00
Accrued wages payable	467 00	523 00
Rent collected in advance	100 00	150 00

The statements prepared by the bookkeeper showed

Net profit		
First year	11,215 00	
Second year		12,395 00
Net worth		
At end of first year	86,215 00	
At end of second year		91,110 00

Compute the adjusted profit for each year, and the adjusted net worth at the end of each year.

ASSIGNMENT MATERIAL FOR CHAPTER 13

Questions

1. Explain the following terms as applied to promissory notes:
   (a) Endorser.
   (b) Endorsee.
   (c) Unqualified endorsement.
   (d) Qualified endorsement.
   (e) Endorsement in full.
   (f) Endorsement in blank.
   (g) Restrictive endorsement.
   (h) Accommodation endorsement.
   (i) Contingent liability on notes receivable discounted.
   (j) Discount period.

2. What is the purpose of requiring an endorsement on paper that is payable to bearer?

3. What is the purpose of the Notes Receivable Discounted account?

4. What transactions are recorded in the following accounts?

Notes Receivable

19—					19—				
July	1	A. Smith		500 00	Aug.	12	A. Tillman		200 00
	9	J. Griffin		750 00		21	J. Griffin		750 00
	28	A. Tillman		200 00					
Aug.	4	J. P. Clark		100 00					

Notes Receivable Discounted

19—					19—				
Aug.	21	J. Griffin		750 00	Aug.	12	J. Griffin		750 00
						14	J. P. Clark		100 00

How should the facts shown by these accounts appear in the balance sheet?

5. Compute the proceeds of the following \$3,000.00 notes:

	Date of Note	Time of Note	Rate of Interest on Note	Date Discounted	Rate of Discount Charged by Bank
(a)	June 9, 1918	60 days		June 15	6%
(b)	June 9, 1918	60 days	5%	June 15	6%
(c)	June 9, 1918	2 months		June 15	6%
(d)	June 9, 1918	2 months	5%	June 15	6%

Problems—Group A

Problem A-1. Make entries in journal form to record the following transactions.

(1a) Feb. 3—Discounted our \$5,000.00, 30-day note payable at the bank. Discount rate, 6%.

(1b) Mar 5—Paid the above note at the bank
(2a) May 9—Received a 30-day, non interest note from Kurt Hudson, $3,000 00, to apply on account
(2b) May 17—Discounted the Hudson note at bank Discount rate, 6%
(2c) June 8—Hudson paid the bank for his note
(3a) July 8—Discounted at bank a 60-day, non interest note signed by Richard Coogan, dated July 1 Face of note, $5,400 00 Discount rate, 5%
(3b) Sept 6—Coogan dishonored his note and we paid the bank
(4a) Oct 7—Discounted at bank a 60-day, 6% note dated October 3, for $7 500 00, received from Fred Whitney Discount rate, 5%
(4b) Dec 2—Whitney paid his note at the bank
(5a) Jan 16—Discounted at bank a 60-day, 6% note for $4,500 00, received on January 11 from Lester Madison to apply on account Discount rate, 7%
(5b) Mar 13—Madison dishonored his note and we paid the bank the amount due together with a protest fee of $3 15
(6a) Apr 11—Received a 30-day, non interest note for $3,000 00 from George Anthony to apply on account
(6b) Apr 17—Transferred this note to David Jubb to apply on account Discount rate 6%
(6c) May 11—Anthony paid Jubb for the note due today
(7a) June 19—Received a 60-day, 6% note for $3,600 00 from Chester French to apply on account
(7b) June 25—Transferred this note to Martin Nelson to apply on account Discount rate 5%
(7c) Aug 18—French dishonored the note and we made payment to Nelson, including a protest fee of $2 85
(8a) Sept 12—We received from F D Victor, to apply on his account, a 30-day, non interest note signed by Newton Harris, dated August 31 for $5,000 00 The note was taken at a discounted value, rate 6%
(8b) Sept 30—Collected the above note from Harris
(9a) Oct 15—Charles Snowden was indebted to us on account in the amount of $8,000 00 He transferred to us a 60-day, 6% note for $7,000 00 dated October 3 signed by Yates & Peterson, which we took on a 6% discount basis Snowden paid us the remainder of his account in cash
(9b) Dec 2—Yates & Peterson dishonored the note, we presented it to Snowden who paid it in full

Problem A-2 Record the transactions of Problem A-1 in the columnar cash books and journal provided in the laboratory material

Problems—Group B

Problem B-1 Make entries in journal form to record the following transactions on the books of Snow and Harris

Oct 13—Jacob Snow sold merchandise to Frank Harris, $2,400 00, and received a 30-day, non interest note from Harris for the amount of the sale
19—Snow discounted the note at the bank, discount rate, 6%
Nov 12—Harris paid the note at the bank

Problem B-2. Make entries in journal form to record the following transactions on the books of Brennan and Ward.

Dec. 19—Patrick Brennan sold merchandise to Samuel Ward, $6,000.00, and received a 60-day, 6% note from Ward for the amount of the sale.
31—Brennan discounted the note at the bank; discount rate, 4%.
Feb. 17—Ward dishonored the note. Brennan paid the bank the face of the note, the interest, and a protest fee of $2.87.
23—Ward gave Brennan a new 30-day, 6% note for $3,500.00, and paid Brennan the remainder of his indebtedness in cash.

Problem B-3. Make entries in journal form to record the following transactions on the books of Walsh, Voss, and Hartman.

Jan. 13—Emil Hartman sold merchandise to Homer Voss, $4,500.00, and received a 60-day, non-interest note for the amount of the sale.
24—Peter Walsh sold merchandise to Emil Hartman, $6,200.00. Hartman transferred to Walsh the note which he had received from Voss; Walsh took it on a 6% discount basis. Hartman paid Walsh the balance of the invoice in cash.
Apr. 14—Walsh collected the note from Voss.

Problem B-4. Make entries in journal form to record the following transactions on the books of Dempsey, Rogers, and Walton.

May 16—James Dempsey sold merchandise to B. E. Rogers, $2,400.00, and received a 30-day, 6% note for the amount of the sale.
28—David Walton sold merchandise to James Dempsey, $5,400.00, and received the following:
The Rogers note, which he took on a 6% discount basis. A 60-day, 6% note for $2,000.00, signed by Dempsey. Cash for the balance.
June 15—Rogers dishonored the note and Walton collected it from Dempsey. Dempsey collected $1,000.00 from Rogers.
July 27—Walton collected the $2,000.00 note from Dempsey.

Problem B-5. Make entries in journal form to record the following transactions on the books of Vance, Howard, and Spencer.

Aug. 15—Oliver Vance sold merchandise to Richard Howard, $3,000.00, and received Howard's 60-day, 6% note for the amount of the invoice.
21—L. H. Spencer sold merchandise to Oliver Vance, $4,800.00, and received:
The Howard note, which he took on a 5% discount basis. A 60-day, 5% note for $1,500.00, signed by Vance. Cash for the balance.
24—Spencer discounted both of the notes at the bank; discount rate, 4%.
Oct. 14—Howard dishonored his note and Spencer paid the bank the face, the interest, and a protest fee of $1.92.
15—Spencer collected from Vance the amount he paid the bank for the dishonored Howard note.
17—Vance received from Howard a new 30-day, 6% note for $2,000.00 and cash for the remainder of the amount owed.
20—Vance paid his discounted note at the bank.

ASSIGNMENT MATERIAL FOR CHAPTER 14

Questions

1 A check is a bill of exchange Explain this statement

2 Who are the parties to a bill of exchange?

3 Explain the following terms used in connection with bills of exchange
- (a) Drawer
- (b) Drawee
- (c) Payee
- (d) Acceptance (two meanings)
- (e) Commercial bill
- (f) Sight draft
- (g) Time draft

4 What is a trade acceptance?

5 Give the procedure and entries of the drawer in the use of a two-party sight draft
- *(a) For the collection of an account*
- (b) In connection with a C O D shipment

6 Describe two transactions which might involve the charging of an exchange fee by a bank

7 Describe two transactions which might involve the charging of a collection fee by a bank

Problems—Group A

Problem A 1 Make entries in journal form to record the following transactions

(1) July 1—*Gave our check to Ritz Allerton Company for $300 00 in payment* of their account

(2) Aug 5—Issued a check for $450 00 in payment of our account with St Johns Co At their request we had the check certified

(3) Aug 16—Issued a check for $125 15 to the Fourth National Bank for a cashier s check for $125 00 made payable to us We endorsed the check and sent it to Fort Dodge Products Co in full payment of our account

(4) Aug 22—Received a bank draft from Gates & Martin for $200 00 to apply on account

(5a) Sept 25—We drew a $600 00 sight draft on F R West payable to ourselves and left it with our bank for collection

(5b) Sept 29—We were informed by the bank that West paid the draft and that our *account had been credited with the proceeds $599 50*

(6) Oct 10—Our bank informed us that it had received for collection a sight draft for $375 00 drawn on us by Patterson Brothers to apply on account We instructed the bank to pay the draft and charge it to our account

(7a) Nov. 17—Sold merchandise to Allen & Block for $760.00; terms, sight draft with bill of lading attached. The sight draft and bill of lading were left with our bank for collection.
(7b) Nov. 20—Received a notification from our bank that it had credited our account with $759.00, the proceeds of the Allen & Block draft.
(8) Dec. 11—Our bank notified us that it held a $300.00 sight draft drawn on us by Winfield Company, with bill of lading attached. We drew a check payable to the bank for the amount of the draft; after receiving the bill of lading from the bank, we presented it to the railroad and received the merchandise.
(9a) Jan. 14—P. N. Gleason has owed us $450.00 for several months. We drew a draft on Gleason today, payable to ourselves, 15 days after sight, for $450.00, and mailed it to Gleason with a request that he accept it.
(9b) Jan. 16—The accepted draft was received from Gleason today. It was accepted under date of January 15.
(9c) Jan. 28—Left the Gleason acceptance at the bank for collection.
(9d) Feb. 2—Received notification from the bank that the Gleason acceptance had been collected and that our account at the bank had been credited with the proceeds, $449.50.
(10a) Mar. 19—Received a letter from Henderson, Inc., requesting that we accept the enclosed draft for $600.00, payable 30 days after sight, to settle our overdue account. We accepted the draft and returned it to the drawer.
(10b) Apr. 17—Sent Henderson, Inc., a check for $600.00 in payment of our acceptance.
(11a) Oct. 5—Forest Hills Wholesale Co. bought $500.00 worth of merchandise today. They are to accept the 30-day draft accompanying the invoice.
(11b) Oct. 6—Forest Hills Wholesale Co. returned the accepted draft; it is due 30 days from date.
(11c) Nov. 4—Received Forest Hills Wholesale Co.'s check for $500.00 in payment of acceptance due today.
(12a) Aug. 21—Purchased $900.00 worth of merchandise from Dorchester Supply Co.; terms, trade acceptance due 45 days after sight. The merchandise was received and the draft was accepted.
(12b) Oct. 5—Issued our check for $900.00 in payment of acceptance held by Dorchester Supply Co.
(13a) May 15—Sold $2,400.00 worth of merchandise to Cross & Wells; terms, 10-day sight draft less 1% discount.
(13b) May 16—Received the 10-day acceptance from Cross & Wells. It is due May 25.
(13c) May 17—Discounted the Cross & Wells acceptance at the bank. Discount rate, 6%.
(13d) May 25—The bank informed us that Cross & Wells dishonored their acceptance, due today. We paid the bank.
(14a) July 6—We drew a sight draft on Lester Mark requesting him to pay $450.00 to Cook Agency, Inc., to apply on our liability to that company.
(14b) July 8—Cook Agency, Inc., notified us that Mark had paid the draft drawn on him.
(15a) Aug. 10—W. W. Jones presented a 45-day sight draft drawn on us by D. J. Sickle, payable to Jones, for $350.00. We accepted the draft.

(15b) Sept 24—We were notified by the bank that it held for collection the 45-day acceptance payable to Jones We instructed the bank to pay the draft and charge it to our account

Problem A-2 Record the following transactions in the columnar cash books and journal provided in the laboratory material, and make supplementary entries in the note registers

(1a) Jan 15—Received a 30-day, non-interest note for $1,000 00 from Henry Higgins to apply on account
(1b) Feb 14—Collected the Higgins note
(2a) Mar 6—Issued a 60-day non interest note for $1,500 00 to Gates Bros to apply on account
(2b) May 5—Paid the Gates Bros note
(3a) June 10—Received a 30-day 6% note for $2 500 00 from John Holmes to apply on account
(3b) July 10—Collected the Holmes note
(4a) Aug 17—Received a 30-day, non interest note from George White for $700 00 the amount of a sale today (Omit entry for sale but assume it has been made in the sales book)
(4b) Sept 16—White dishonored his note due today
(5a) Oct 10—Issued a 60-day non interest note to David Davis for $500 00, the amount of a purchase today (Omit entry for purchase, but assume it has been made in the purchase book)
(5b) Dec 9—We dishonored the David Davis note at maturity
(6a) Jan 15—Received a 30-day, non interest note for $1,000 00 from Henry Forbes to apply on account
(6b) Feb 14—Forbes paid only $300 00 on his note due today
(7a) Mar 26—Received a 30-day 6% note for $1,200 00 from Frank Luce to apply on account
(7b) Apr 25—Luce paid us $700 00 on the principal of his note due today, and the interest and gave us a new 6% note due in 30 days for the balance
(7c) May 25—Collected from Luce the note received on April 25
(8a) June 14—Issued a 60-day 6% note to Duncan Dale for $2,500 00 to apply on account
(8b) Aug 13—Paid the interest on the Dale note and $1,500 00 on the principal and gave a new 30-day 6% note for the balance
(8c) Sept 12—Paid the Dale note given on August 13
(9a) Oct 23—Discounted our $5 000 00 60-day note payable at the First State Bank Discount rate, 6%
(9b) Dec 22—Paid the $5 000 00 note at the bank
(10a) Jan 3—Received a 30-day, non interest note for $2,000 00 from Fred Matthews to apply on account
(10b) Jan 9—Discounted the Matthews note at bank Discount rate, 6%
(10c) Feb 2—Matthews paid his note at the bank
(11a) Mar 16—Received a 60-day, 6% note for $6,000 00 from Robert Richardson to apply on account
(11b) Mar 28—Discounted the Richardson note at the bank Discount rate, 5%
(11c) May 15—Richardson dishonored his note We paid the bank the face of the note, the interest, and a protest fee of $2 15
(12a) June 19—Received a 30-day, 6% note for $2,400 00 from Theodore Wiley to apply on account

(12b) June 25—Transferred the Wiley note to Irwin Hall to apply on account. Hall took the note at a 6% discounted value.
(12c) July 19—Wiley paid Hall for the note and interest.
(13a) Aug. 22—We took from Luther Burns, on a 6% discounted basis, to apply on account, a note for $1,500.00 signed by Oscar Haines, dated August 16, due in 60 days, and bearing 5% interest.
(13b) Oct. 15—Haines failed to pay the note at maturity.
(14a) Nov. 26—Drew a sight draft for $750.00 on Burton West and left it at the bank for collection.
(14b) Nov. 29—The bank reported that it had credited our account with $749.50, the proceeds of the West draft.
(15a) Dec. 22—Day before yesterday we drew a draft for $750.00, payable 30 days after sight, on Edmond Blair, with a request that he accept it in settlement of his overdue account. The acceptance was received today; the acceptance was dated December 21.
(15b) Dec. 28—Discounted the Blair acceptance at the bank. Discount rate, 6%.
(15c) Jan. 20—Blair paid his acceptance at the bank.
(16a) Feb. 14—Sold merchandise on February 12 to Kenneth Whitney, $600.00; terms, draft due 10 days from date of sale, with bill of lading attached, less 1% cash discount. (Make no entry for the sale, but assume that an entry has been made in the sales book.) The acceptance was received today.
(16b) Feb. 22—Collected the Whitney acceptance.
(17a) Mar. 16—Purchased $750.00 of merchandise from Carl Brown; terms, 10-day draft less 2%. (Make no entry for the purchase.) We accepted the draft.
(17b) Mar. 26—Paid the Brown acceptance.

Problems—Group B

Problem B-1. Make entries in journal form to record the following transactions on the books of Dudley and Benton.

July 13—Forrest Dudley sold merchandise to G. P. Benton for $420.00. The terms of sale were bill of lading attached to sight draft for the amount of the sale less 2% discount. Dudley shipped the goods today.
15—Benton paid the sight draft at the bank, received the bill of lading, and obtained the goods from the freight depot.
17—The bank informed Dudley that it had credited his account with the proceeds of the draft, $411.10.

Problem B-2. Make entries in journal form to record the following transactions on the books of Larson and Woodland.

Aug. 7—Nels Larson sold merchandise to Charles Woodland for $675.00; terms, trade acceptance due 30 days after date. The goods were shipped today.
9—Woodland received the merchandise. He received Larson's draft in the mail. He accepted the draft and returned it to Larson.
11—Larson received the acceptance.
Sept. 4—Woodland purchased a bank draft for $675.00 and sent it to Larson to pay the acceptance. The bank charged an exchange fee of $.25.
6—Larson received the bank draft.

Problem B-3 Make entries in journal form to record the following transactions on the books of Conrad and Sheppley

Nov 14—Ernest Conrad sold merchandise to Edward Sheppley for $900 00, terms, 30-day acceptance The merchandise was delivered and the acceptance was received today

16—Conrad discounted the acceptance at the bank Discount rate, 6%

Dec 13—Sheppley paid the acceptance at the bank

Problem B-4. Make entries in journal form to record the following transactions on the books of Barton and Northrup

Jan 6—Paul Barton sold merchandise to G F Northrup for $750 00, terms, acceptance due 30 days from date The merchandise was shipped and the draft was mailed today

7—Northrup received the merchandise and accepted the draft

8—Barton received the acceptance

9—Barton discounted the acceptance at the bank Discount rate, 6%

Feb 5—Northrup dishonored the acceptance, and Barton paid it

Problem B-5 Make entries in journal form to record the following transactions on the books of Capper Houston and Lunt

Mar 14—Hiram Capper sold merchandise to Ralph Houston for $1,200 00, and, in accordance with the terms of sale, Houston accepted a draft due 30 days from date

19—David Lunt sold merchandise to Hiram Capper for $1,450 00 In settlement, Capper transferred the Houston acceptance to Lunt on a 6% discount basis and paid the remainder in cash

22—Lunt discounted the Houston acceptance at the bank, discount rate, 4%

Apr 13—Houston paid the acceptance at the bank

Problem B-6 Make entries in journal form to record the following transactions on the books of Abbott Davidson, and Winston

May 12—Frank Abbott sold merchandise to George Davidson for $1,500 00, terms, 30-day sight draft The goods were shipped and the draft was mailed today

13—Davidson received the merchandise, and accepted and returned the draft

14—Abbott received the acceptance

17—Abbott transferred the acceptance to John Winston on a 6% discount basis to apply on account

June 12—Davidson dishonored the acceptance and it was paid by Abbott

ASSIGNMENT MATERIAL FOR CHAPTER 15

Questions

1. A voucher system includes two features:
   (a) A voucher, which must be prepared before a disbursement can be made.
   (b) A voucher register.

What benefits are obtained by the use of the voucher and by the use of the voucher register?

2. How does a voucher system permit the elimination of the accounts payable subsidiary ledger?

3. If you were designing a voucher system, how would you determine what debit columns to have in the voucher register?

4. Why is it necessary to have a Sundry Accounts Debited section in the voucher register? When are the entries in this section posted? When are all other entries posted?

5. When a voucher system is used, what is the procedure:
   (a) When a purchase is made on account?
   (b) When a purchase is made for cash?

6. What is the procedure when a voucher is paid by note?

7. If, at the time a liability is incurred, it is known that it will be paid in installments, what is the accounting procedure with a voucher system?

8. Would you recommend the use of a voucher system if a company is in so poor a financial condition that its liabilities are usually paid in installments?

9. How are the following situations handled when a voucher system is in use?
   (a) A voucher is partially paid.
   (b) Part of a purchase for which a voucher has been made is returned and credit is received.

Problems—Group A

Problem A-1. The general ledger accounts on page 576 are to be used in this problem.

The transactions in the following list which are marked with an asterisk have been recorded in the books of original entry in the laboratory material. You are to complete the recording of the other transactions in the books of original entry, complete the footings of the books of original entry, post to the general ledger and the subsidiary accounts receivable ledger, take a trial balance of the general ledger, and prepare a schedule of vouchers payable and a schedule of accounts receivable.

Unless otherwise stated, all sales are made on the following terms: *2/10, n/30*, f.o.b. destination.

Cash	Advertising
Accounts Receivable	Salesmen's Salaries
Notes Receivable	Freight Out
Delivery Equipment	Delivery Expense
Store Fixtures	Officers' Salaries
Vouchers Payable	Office Salaries
Notes Payable	Office Supplies
Capital Stock	Postage
Sales	Collection and Exchange
Returned Sales and Allowances	Interest Income
Purchases	Interest Expense
Returned Purchases and Allowances	Discount on Purchases
Freight In	Discount on Sales
Store Rent	

Sept 1— Issued $12,500 00 of capital stock to P D Angulo for cash, and $12 500 00 to J R Reidel for his 20 day, 6% note

Paid Axel Weinbaum store rent for the month, $250 00

Discounted a $7 500 00, 10-day note payable at the Western National Bank at 6%

2— Purchased merchandise for cash from F F Smith, $4,590 00

Purchased office supplies for cash from Oldham Supplies Co , $75 00

Bought a half-ton delivery truck from Brown Motor Mart for cash, $1,160 00

3— Received merchandise purchased on account from R D Williams, $2,100 00 invoice dated September 2, terms, 1/10, n/30

Received merchandise purchased from G N Stone, $1,560 00, invoice dated September 2 We accepted a 15-day sight draft for $1,513 20 the amount of the invoice, less 3% discount

4—*Sold merchandise to D S House, $1,100 00, invoice 1, terms, sight draft with bill of lading attached for the amount of the invoice The documents were left with the bank for collection

5— Paid the A & A O Railway freight bills as follows

Freight in	$32 20
Freight out	27 20

Received merchandise purchased on account from A M Henry, $525 00, invoice dated September 4 Terms, 1/15 n/30

6—*Sold merchandise to C A Johnson, $900 00 Johnson is to pay the freight and deduct the amount thereof when making his remittance

Purchased postage stamps for cash, $50 00 Check issued to Postmaster

We were notified by the bank that our account had been credited with $1,099 70, the proceeds of the House sight draft left with the bank on September 4 for collection

8— Purchased store fixtures from S S Green for $2,750 00 Gave Green a check for $1,000 00, and a 15-day, 6% note for the balance (Make a voucher register entry for the $2,750 00, record the settlement in the check register and journal)

Sept. 9—*Issued credit memo 1 to C. A. Johnson for $50.00, for defective goods included in our shipment of September 6.

Paid P. V. Lewis $55.10 for gas and oil for delivery truck.

10—*Sold merchandise to O. P. North on account, $1,800.00.

11—*Sold D. S. House merchandise on account, $1,215.00.

Gave Western National Bank a check for $7,500.00 in payment of note.

12— Received merchandise purchased on account from L. L. Church. $870.00; terms, 1/10; n 30. Invoice dated September 10.

13—*Sold merchandise to C. A. Johnson on account, $500.50.

Gave Western National Bank a check for $2,079.50 in payment for a bank draft in our favor, in the amount of $2,079.00. This draft was sent to R. D. Williams in payment of his invoice of September 2, less 1% discount. The $.50 difference between the amount of the check issued and the amount of the bank draft purchased was exchange.

15— Issued check to the order of Payroll to obtain funds for the following disbursements:

Salesmen's salaries	$400.00
Office salary	100.00
Deliveryman's wages	150 00

16— Received C. A. Johnson's check for payment of invoice of September 6, as follows:

Sale......	$900 00
Less allowance. .	50 00
Remainder ...	$850 00
Less 2% discount	17 00
Remainder	$833.00
Less freight paid by Johnson	13 00
Remittance	$820 00

Issued check to A. M. Henry in payment of invoice of September 4, less 1% discount.

Received notice from R. D. Williams that our remittance of September 13 arrived too late to entitle us to the discount.

*Issued credit memo 2 to O. P. North, $30.00, on account of unsatisfactory merchandise included in the shipment of September 10.

18— Sent G. N. Stone a check for $1,513.20 in payment of our acceptance due today.

L. L. Church's credit memo 16 for $27.50 received to apply on merchandise purchased from him on invoice of September 10.

19— Received merchandise purchased from L. L. Church on account, $501.00; invoice dated September 18; terms, 2/10; n 30.

20— Paid L. L. Church for merchandise received September 12, less credit memo of $27.50, and less 1% discount.

Received check from O. P. North for invoice of September 10, as follows:

Invoice.. .. .	$1,800 00
Less credit memo.. .	30 00
Remainder........ .	$1,770 00
Less 2% discount...	35.40
Remittance.........	$1,734.60

Sept 22— Received J R Reidel's check for $12,541 67 in payment of note due yesterday, with 20 days' interest at 6%
*Sold merchandise on account to O P North, $1,500 00
North accepted a 10-day draft, dated today, for this amount, less 2%
Received check for $1,190 70 from D S House in payment of our invoice of September 11 The discount period expired yesterday, since that was Sunday, we allow the discount

23— Received check from C A Johnson in payment of our invoice of September 13, less 2% discount
Sent check to S S Green in payment of our note and interest due today

24— Cash sale of merchandise, $1,720 00
*Issued credit memo to C A Johnson for $36 00, for defective merchandise included in sale of September 13

25—*Sale on account to D S House, $920 00

26— Paid the *Daily Mascot* $52 50 for advertising
Paid L L Church for invoice of September 18 less 2% discount
Gave C A Johnson a check for $36 00 in payment of the credit balance in his account

27— Received merchandise purchased on account from R S Jones, $200 30 Invoice dated September 27 Terms, 2/10 n/30

29— Received merchandise purchased on account from R D Williams, $850 00 *Invoice dated September 25 Terms, 1/10, n/30*
Paid A & A O Railway as follows

Freight in	$40 00
Freight out	45 00

30— Paid salaries and wages as follows

Officers	$400 00
Office	100 00
Salesmen	400 00
Deliveryman	150 00

Problem A-2 Record the following transactions in the books of original entry provided in the laboratory material accompanying the text

The following general ledger accounts are to be used

Cash	Store Rent
Accounts Receivable	Advertising
Notes Receivable	Salesmen's Salaries
Notes Receivable Discounted	Freight Out
Delivery Equipment	Delivery Expense
Store Fixtures	Officers Salaries
Vouchers Payable	Office Salaries
Notes Payable	Office Supplies
Capital Stock	Postage
Sales	Collection and Exchange
Returned Sales and Allowances	Interest Income
Purchases	Interest Expense
Returned Purchases and Allowances	*Discount on Purchases*
Freight In	Discount on Sales

After writing up the transactions in the books of original entry:

Post to the general ledger and the accounts receivable ledger.
Take a trial balance of the general ledger.
Prepare a schedule of the accounts receivable.
Prepare a schedule of the vouchers payable.

Jan. 1—Issued $5,000.00 of capital stock to M. L. Goldsmith for cash. Received from John Eastman his 30-day, 6% note for $5,000.00; issued capital stock to him of that par value.

2—Purchased merchandise on account from J. A. Bartlett & Co., $720.00; invoice No. K48, dated today; terms, 2/10; n/30.
Purchased from the Eastern Equipment Company a delivery truck, $1,300.00, and store fixtures, $700.00; gave a 20-day, 6% note.
Paid Gratz Service Station $21.14 for gas and oil for delivery truck.

3—Purchased merchandise on account from J. B. Blackburn, $220.00; invoice No. 1432, dated January 2; terms, 20-day draft. Accepted the draft, which is due January 23.
Sale on account to Chas. Hollister, invoice No. 1, $500.00, terms, 2 10; n/30. (Unless otherwise specified, all sales are made on these terms. You may assume that invoices are numbered consecutively.)

4—Paid Western Advertising Service $82.00.

5—Purchased merchandise from C. O. Henderson for cash, $325.00.
Sale on account to Frank Miller, $325.00. Miller accepted a 10-day draft for $318.50 in settlement of this invoice.
Discounted the Miller draft at the bank; discount rate, 6%.

6—Paid Jones Realty Company rent for January, $175.00.
Purchased merchandise on account from Boyle & Co., $410.00; invoice No. R142, dated January 7. We signed a 30-day, 6% note for $410.00 in settlement of this purchase.

8—Paid Dalton Railroad freight in, $27.30, and freight out, $16.45.
Sale on account to Paul Rose, $450.00.

10—Paid $10.00 for postage stamps. Check made payable to Postmaster.
Paid J. A. Bartlett & Co. for invoice of January 1, less 2%.
Sale on account to Frank Miller, $415.00. Miller accepted a 15-day, 6% draft for the face of the invoice.

11—Purchased merchandise on account from C. H. Bulger, $325.00; invoice No. 47, dated today; terms, 2, 10; n 30.

12—Paid Western Printers $31.25 for stationery.

13—Chas. Hollister paid our invoice of January 3, less 2%.
Sale on account to Paul Rose, $245.00.
Returned unsatisfactory merchandise to C. H. Bulger and received his credit memo No. 12 for $17.50.
Paid Milwaukee Railroad freight in, $12.00 and freight out, $8.30.

15—Purchased merchandise on account from D. E. Mathews, $57.50; invoice No. 148, dated today; terms, net 10 days.
Issued a check to Payroll for the following salaries:

Salesmen	$310.00
Deliveryman	140.00
Office	120.00
Officers	250.00
Total	$820.00

Jan 15—The Merchants Bank informed us that it was unable to collect the Miller draft due today which we discounted on January 5 We therefore paid the bank the face of the draft, \$318 50, plus a protest fee of \$1 25 Miller was allowed a discount of \$6 50 when he accepted the draft

Issued credit memo to Paul Rose for \$47 50 on account of damaged merchandise included in sale of January 8

Cash sale, \$110 00

16—Discounted our 30-day note payable for \$2,000 00 at Merchants Bank. The discount rate was 6%

17—Cash purchase of merchandise from B L McGuire, \$200 00

Purchased merchandise from J B Blackburn, \$490 00, invoice No 1452, dated January 16 We paid Blackburn \$290 00 on account and gave a 10-day, 6% note for the balance, \$200 00

Paul Rose paid our invoice of January 8 less credit of January 15, and less 2% discount

18—Sale on account to Chas Hollister, \$314 00

Purchased merchandise from Edward Reilly, \$825 00, invoice No KX12, dated January 17 terms, 2/10, n/30

Paid Gratz Service Station \$8 20 for gas and oil

20—Purchased office supplies on account from Universal Supply Co, \$28 25

Paid Milwaukee Railroad \$14 50 for freight on goods purchased from Edward Reilly on January 18 This is chargeable to Reilly

Paid C H Bulger for purchase of January 11, less return of January 13 and less 2% cash discount

22—Paid Eastern Equipment Company the note due today

Face of note	\$2,000 00
Interest at 6% for 20 days	6 67
Total	\$2 006 67

Paid *Daily Tribune* \$17 30 for advertising

23—Received credit memo No 22 from Edward Reilly for merchandise returned today, \$48 25 This applies against his invoice KX12

Paid D E Mathews for purchase of January 15, \$57 50

Paid the Blackburn draft due today

Cash sale, \$75 00

24—Purchased merchandise on account from Howard Company, \$510 00, invoice No 328, dated January 23, terms, 2/10, n/30

Sale on account to Frank Miller, \$190 00

25—Frank Miller paid his \$415 00 acceptance due today, together with interest in the amount of \$1 04

Part of the shipment received from D E Mathews on January 15 was returned today, and we received his credit memo No X17, \$13 75 Inasmuch as we have paid for this merchandise, the credit memo was accompanied by a check in the same amount

Paul Rose paid our invoice of January 13, less 2% He also deducted \$4 25 for freight paid by him We inform Rose that, *inasmuch as the* discount period has expired, we cannot allow the deduction of the discount The bank charged \$ 15 exchange on the check.

Issued credit memo to Frank Miller, \$84 00, for unsatisfactory merchandise sold him on January 10

Jan. 26—Purchased merchandise on account from D. E. Mathews, $425.00, invoice No. K181, dated today; terms, 2/10; n/30.

Sale on account to Paul Rose, $248.00.

27—Paid the Blackburn note due today:

Face of note	$200 00
Interest for 10 days at 6%	33
Remittance	$200 33

This remittance was made by bank draft, for which the Merchants Bank charged us $.25. We gave the bank a check to pay for the draft

Chas. Hollister paid our invoice of January 18, less 2%.

Received Paul Rose's check for the discount taken in error on January 25.

Purchased merchandise from Boyce Corporation for cash, $82.25.

Paid Edward Reilly as follows.

Invoice, Jan 18	$825 00
Return, Jan. 23	48 25
Balance.	$776 75
Less 2% cash discount	15 54
Net	$761 21
Less freight paid for Reilly	14 50
Remittance	$746 71

29—Sale on account to Chas. Hollister, $385.00.

30—Paid salaries as follows:

Salesmen	$310.00
Deliveryman	140 00
Office	140 00
Officers	250 00
Total	$840 00

Cash sale, $64.50.

31—Purchased merchandise on account from Weber and Fields, $185.00; invoice No. 714, dated January 29; terms, 2/10; n/30.

ASSIGNMENT MATERIAL FOR CHAPTER 16

Questions

1. Define a partnership How is it created?
2. Name the accounts used to record the following matters.
   (a) Capital investments of
      (i) An individual proprietor
      (ii) Partners
      (iii) Stockholders
   (b) Withdrawals of profits by
      (i) An individual proprietor
      (ii) Partners
      (iii) Stockholders
3. State the differences in procedure of closing the books of
   (a) An individual proprietorship
   (b) A partnership
   (c) A corporation

4. James Dudley is in business as an individual proprietor He takes merchandise from the store for his personal use The merchandise cost $100 00, and he has marked it to sell for $150 00 What entry should be made?

5. What is one of the chief disadvantages of a partnership as compared with a corporation?

Problems—Group A

Problem A-1. Following is the trial balance of A F Waltz as of June 30, 19—

Advertising	250 00	
Accounts Payable		6,000 00
Accounts Receivable	1,786 90	
Cash	10,004 96	
Collection and Exchange	18 18	
Delivery Equipment	4,200 00	
Delivery Expense	212 00	
Discount on Purchases		301 00
Discount on Sales	142 00	
Freight In	140 00	
Freight Out	98 00	
Insurance	312 00	
Interest Expense	92 85	
Interest Income		158 12
Inventory (June 30, 19—)	11,000 00	
Mortgage Payable (6%)		1,500 00
Notes Payable		1,300 00
Notes Receivable	1,388 50	
Notes Receivable Discounted		300 00
Office Expense	90 00	
Office Salaries	400 00	

Purchases	11,227.73	
Reserve for Bad Debts		182.00
Reserve for Depreciation—Delivery Equipment		1,200.00
Reserve for Depreciation—Store Equipment		700.00
Returned Purchases and Allowances		312.00
Returned Sales and Allowances	340.00	
Sales		18,400.00
Salesmen's Salaries	400.00	
Store Equipment	3,850.00	
A. F. Waltz, Capital		16,000.00
A. F. Waltz, Drawings	400.00	
	46,353.12	46,353.12

The inventory on June 30 was $8,612.00.
Additional facts:

Accrued interest on notes receivable	$ 51.60
Accrued interest on notes payable	19.60
Accrued wages:	
Office clerks	200.00
Salesmen	175.00
Deliverymen	38.00
Interest collected in advance	3.12
Prepaid interest on notes payable	12.68
Unexpired insurance	284.00
Accrued interest on mortgage	15.00

Annual depreciation rates are as follows:

Delivery equipment	20%
Store equipment	12½%

Increase the reserve for bad debts by a credit equal to ¾ of 1% of the net sales.
You are to prepare:

(a) Adjusting entries.
(b) Working papers.
(c) Statement of profit and loss.
(d) Statement of proprietor's capital.
(e) Balance sheet.
(f) Closing entries.

Problem A-2. The laboratory material contains a ledger sheet showing the following account balances on December 31:

O. B. Duncan, Capital		$20,000.00
O. B. Duncan, Drawings	$3,000.00	
C. D. Smith, Capital		17,500.00
C. D. Smith, Drawings	2,800.00	
Profit and Loss (net income for the year)		7,980.00

Profits are shared in the ratio of ⅔ to Duncan and ⅓ to Smith.
Prepare and post journal entries to complete the closing of the books. Bring down the new balances in the Capital accounts.

Problem A-3. The laboratory material contains a ledger sheet with account balances on December 31 as stated on page 584.

Tim Murphy, Capital		$30,000 00
Tim Murphy, Drawings	$2 500 00	
Joe Maloney, Capital		25 000 00
Joe Maloney, Drawings	2,000 00	
Profit and Loss (net income for the year)		12 500 00

Profits are divisible as follows

Interest on capital balances at 6%	
Salaries	
Murphy	$4,000 00
Maloney	3 000 00
Remainder equally	

Prepare and post journal entries to complete the closing of the books Bring down the new balances in the Capital accounts

Problem A-4 The laboratory material contains a ledger sheet showing the following account balances on December 31

L B Harrison Capital		$25 000 00
L B Harrison, Drawings	$5 000 00	
D F Riley Capital		25,000 00
D F Riley, Drawings	3 000 00	
Profit and Loss (net income for the year)		8,500 00

Prepare and post journal entries to complete the closing of the books Profits are divisible as follows Salaries—Harrison $6 000 00, Riley, $4,000 00, balance equally

Bring down the new balances in the Capital accounts

Problem A-5 Martin and Stone agree to divide profits as follows

Salaries	
Martin	$6,000 00
Stone	4,000 00

Interest on average capitals at 6% per annum

Remainder equally

Their Capital accounts appear below

Frank Martin, Capital

19—					19—				
May	1			2 400 00	Jan	1			24,000 00
July	1			1,200 00	Aug	1			3,000 00
Sept	1			600 00	Dec	1			4,800 00

Arthur Stone, Capital

19—					19—				
Mar	1			900 00	Jan	1			18 000 00
July	1			2 700 00	May	1			1,500 00
					Oct	1			4,200 00

Compute the average capitals of the partners, and prepare journal entries to divide the $16 280 00 profit

Problems—Group B

Problem B-1. Cole, Dorman, and Paine are partners. Their Capital accounts for 1949 appear below:

Ralph Cole, Capital

1949				1948			
Oct.	10		2,115 00	Dec.	31		15,280 00
				1949			
				June	13		4,150 00

James Dorman, Capital

1949				1948			
May	3		965 00	Dec.	31		19,500 00
Aug.	9		1,215 00	1949			
				Nov.	10		3,875 00

J. L. Paine, Capital

1949				1948			
Feb.	8		465 00	Dec.	31		17,600 00
May	13		385 00				
Dec.	12		265 00				

Make journal entries to divide the $14,280.00 profits under the following agreements:

(a) Profits are to be divided equally.
(b) The first $9,000.00 of profits are to be divided in the ratio of 5, 4, and 3, and the remaining profits are to be divided equally.
(c) Profits are to be divided in the ratio of the partners' capitals at the beginning of the year.
(d) Profits are to be divided in the ratio of the partners' capitals at the end of the year.
(e) Profits are to be divided in the average capital ratio.
(f) Interest at 6% is to be allowed on partners' capitals at the beginning of the year, and the remaining profits are to be divided equally.
(g) Interest at 6% is to be allowed on partners' average capitals, and the remaining profits are to be divided equally.
(h) Remaining profits are to be divided in the ratio of 5, 4, and 3, after crediting the partners with salaries of $4,000.00 each.
(i) Remaining profits are to be divided equally after allowing salaries as follows:

Cole.....	$7,500.00
Dorman...	6,500.00
Paine.....	5,500.00

Also prepare a statement showing the portion of the $14,280.00 profit received by each partner.

Problem B-2. The Profit and Loss account of the firm of Byron, Nelson, and Paige shows a net loss of $3,950.00 for the year. The Capital account balances at the beginning of the year are shown on the following page.

O E Byron	\$30 000 00
P R Nelson	20 000 00
G F Paige	15 000 00

The articles of partnership provide that the partners shall share annual profits equally after allowing interest at 5% on opening Capital account balances and after crediting the partners with salaries as follows

Byron	\$8 000 00
Nelson	6 000 00
Paige	4 000 00

Prepare journal entries to close the Profit and Loss account and a statement showing each partner s net participation

ASSIGNMENT MATERIAL FOR CHAPTER 17

Questions

1. How may a change in the personnel of a partnership be caused?

2. If a partner is to withdraw:
   (a) Why should the books be closed?
   (b) Why may it be proper to revise the valuations of the fixed assets? (In answering this question, assume that the fixed assets are carried at cost in the fixed asset accounts, and that the depreciation reserves have been computed properly.)

3. If the valuations of partnership assets are revised at the time of a change in the firm's personnel, how should the increase or decrease in valuation be divided among the partners?

4. If a partner retires and is not paid in full immediately, should the unpaid balance be left in his Capital account? Give a reason for your answer.

5. What entry should be made to record the admission of George Hoffman into the partnership of Gates, Robins, and Holmes:
   (a) If Hoffman invests $25,000.00 in cash?
   (b) If Hoffman pays $25,000.00 to Max Robins to buy his $20,000.00 interest in the firm?

6. Why is it imperative to divide all profits or losses between the partners before distributing any assets to them when a partnership is dissolved?

7. A partnership's books show the following liabilities and partners' capitals:

Accounts Payable..	$15,000.00
J. P. Oliver, Loan .	6,000.00
F. R. Tuttle, Capital	20,000.00
J. P. Oliver, Capital	25,000.00
Total.....	$66,000.00

All the assets have been sold for $60,000.00, and this amount is on hand in cash. Losses on the disposal of the assets have not been charged to the partners. How should the cash be paid out?

Problems—Group A

Problem A-1. Following is a trial balance of the ledger of Moore, Smith, and Foster, a partnership, on December 31, 19—:

Cash..........	1,520.00	
Accounts Receivable	15,019.00	
Inventory (January 1, 19—).	12,400.00	
Furniture and Fixtures	2,200.00	
Reserve for Depreciation—Furniture and Fixtures		330.00
Delivery Truck....	1,500.00	
Reserve for Depreciation—Delivery Truck.		425.00

Goodwill	10 000 00	
Accounts Payable		4,100 00
Notes Payable		5,000 00
K L Moore, Capital		10,000 00
Frank Smith, Capital		10,000 00
James Foster, Capital		5 000 00
K L Moore, Drawings	2,800 00	
Frank Smith, Drawings	1,700 00	
James Foster, Drawings	3,600 00	
Sales		55,106 00
Sales Returns and Allowances	280 00	
Purchases	30 527 00	
Salesmen's Salaries	2,600 00	
Delivery Expense	1,740 00	
Insurance	360 00	
Taxes	120 00	
Office Expense	650 00	
Interest Expense	75 00	
Discount on Purchases		130 00
	90,091 00	90 091 00

The inventory at the trial balance date was $5,025 00

Frank Smith invested $5,000 00 on February 1 The other Capital accounts remained unchanged throughout the year

The partnership agreement provided that the profits be shared as follows

(1) Interest to be allowed partners at 6% per annum on their Capital account balances at the beginning of the year
(2) Smith and Foster to be allowed salaries of $2,400 00 and $3,600 00, respectively, for their active management of the business
(3) The remainder of the profits to be shared in the following ratio Moore, 40%, Smith, 40%, and Foster, 20%.

Prepare

Working papers
Statement of profit and loss
Statement of partners' capitals
Balance sheet

Problem A-2 The Capital accounts of Benson, Kellogg, and Kent appeared as follows on December 31, 19—.

	Debits	Credits
Benson		
Balance, January 1		$3,000 00
April 1		2,500 00
July 15	$500 00	
September 1		2,262 50
Kellogg		
Balance, January 1		$5,000 00
February 1	$300 00	
May 1	500 00	
July 1	250 00	
December 1		1,000 00

Kent

Balance, January 1 .	$200 00	
February 1. .		$3,100 00
June 1...		5,000 00
August 1 .	500 00	
October 15 .		1,200 00

Profits for the year amounted to $25,000 00, to be divided as follows:

6% interest on the average capital balances.
Salary of $5,000.00 to Kellogg.
Remainder equally.

Prepare a statement of the partners' capitals.

Problem A-3. The net worth on June 30, 19— of Bell and Sons, a partnership, is represented by the following balances in the Capital accounts

James Bell, Sr	$21,000 00
Henry Bell	20,000 00
James Bell, Jr	20,000 00

The only asset of the firm is an investment in real estate. There are no liabilities.

The Hurd Corporation agrees to buy the assets of Bell and Sons for $100,000 00 in cash, after which the partnership is to be dissolved Give the entries necessary to record the sale of the real estate and the dissolution of the partnership.

Problem A-4. Following is a trial balance of the books of Pelly, Stone, and Courtney, a partnership, on June 30, 19—:

Cash.........	7,500 00	
Accounts Receivable	17,500 00	
E. Pelly, Capital		5,000 00
J. R. Stone, Capital.		10,000 00
Frank Courtney, Capital		10,000 00
	25,000 00	25,000 00

Courtney decides to withdraw from the partnership and it is agreed that his interest shall be disposed of as follows:

One fourth of his interest to J. R. Stone for $4,000.00.
One half of his interest to E. Pelly for $8,000.00.
One fourth of his interest to the partnership for $4,000.00.

Prepare the journal entries to be placed on the partnership books to record this transaction.

Problems—Group B

Problem B-1. A trial balance of the books of Jones, Brown, and Smith, a partnership, on December 31, 19— appears on page 590. The nominal accounts have been closed for the year, but no entries have been made distributing the profits to the partners.

Cash	515 00	
Accounts Receivable	11,321 00	
Reserve for Bad Debts		490 00
Notes Receivable	4,200 00	
Notes Receivable Discounted		2,800 00
Inventory (December 31, 19—)	15,150 00	
Delivery Equipment	2,000 00	
Reserve for Depreciation—Delivery Equipment		400 00
Store Equipment	800 00	
Reserve for Depreciation—Store Equipment		120 00
Accrued Interest on Notes Receivable	38 00	
Accounts Payable		2,215 00
Notes Payable		2,000 00
John Jones, Capital		6,000 00
Henry Brown, Capital		6,250 00
Frank Smith, Capital		6,500 00
John Jones, Drawings	300 00	
Henry Brown, Drawings	280 00	
Frank Smith, Drawings	310 00	
Profit and Loss		8,139 00
	34,914 00	34,914 00

Profits are to be divided equally

During the year the following additional investments were made and credited to the Capital accounts John Jones, $500 00, Henry Brown, $500 00, Frank Smith, $750 00

Prepare

Entries to complete the closing of the books
Statement of partners' capitals for the year
Balance sheet on December 31, 19—

Problem B-2. Following is a trial balance of the books of Reed and Son, a partnership, on June 30, 19—.

Cash	500 00	
Accounts Receivable	3,250 00	
Reserve for Bad Debts		125 00
Inventory	5,610 00	
Land	4,900 00	
Buildings	3,840 00	
Reserve for Depreciation—Buildings		765 00
Accounts Payable		450 00
Frank Reed Capital		9 000 00
John Reed, Capital		7,760 00
	18 100 00	18 100 00

Henry Lyons was admitted as a partner, and a new partnership, known as Reed and Lyons, was formed on the following terms

(1) The assets of the old partnership were valued as follows

Accounts Receivable	$3,000 00
Inventory	6 500 00
Land	5,500 00
Buildings (adjust by an entry in the reserve)	3,300 00

(2) Lyons contributed $10,000.00, as follows:

Cash........	$5,000 00
30-day, non-interest note	2,500 00
Accounts receivable, of a face value of $3,000 00, valued at..	2,500.00

Adjust the valuation of the accounts receivable by creating a reserve.

(3) John Reed and Frank Reed contributed sufficient cash to bring their Capital account balances to $10,000.00 each.

Prepare the journal entries to record these transactions, and prepare the opening balance sheet of the new partnership.

Problem B-3. Three partners who divide profits equally have the following Capital account balances:

J. P. Seifert	$ 8,500 00
A. A. Atkins	8,500 00
L. D. Holley	10,815.00
Total	$27,815 00

D. T. Culbertson is to be admitted to the partnership on the following terms:

(1) Holley is to withdraw $815.00 in cash, and Seifert and Atkins are to make cash payments to him from personal funds to compensate him for transferring from his Capital account to theirs, amounts sufficient to adjust all Capital accounts to balances of $9,000.00.

(2) The Inventory and Land accounts on the partnership books are to be increased $1,200.00 and $4,800.00, respectively.

(3) The three partners are to be allowed goodwill totaling $7,200.00.

(4) Culbertson invests in cash an amount sufficient to give him a one-fourth interest in the total capital.

Prepare journal entries to record these facts and submit a statement of the partners' capitals.

Problem B-4. Following is the balance sheet of a partnership:

WILSON, JOHNSON, AND BAKER
Balance Sheet
October 31, 19—

Assets

Cash........	$ 15,000 00
Accounts Receivable	32,700 00
Notes Receivable	5,000 00
Inventory (at cost)..	48,400 00
Unexpired Insurance..	300 00
	$101,400 00

Liabilities and Net Worth

Accounts Payable	$ 15,000 00
Wilson, Capital..	26,000 00
Johnson, Capital	37,400 00
Baker, Capital	23,000 00
	$101,400 00

The P Company purchases the firm's non cash assets assumes its liabilities, and pays the partners $75 000 00 in cash All cash is distributed to the partners Profits are divided equally

Prepare entries in journal form to record these transactions

Problem B-5 The capital balances of three partners, after the closing of the books on September 30, are as follows

Potter	$20 000 00
De Paul	25,000 00
Lester	30,000 00

Profits are divided equally

Potter buys 60% of Lester's interest for $21,000 00, and the firm pays Lester for his remaining interest on the same basis Draft the entries (in journal form) to be made on the partnership books

Problem B-6 The partnership of *A*, *B*, and *C*, who share profits equally, closed its books on December 31, their accounts on that date had balances as follows

A, Capital	$8 000 00
B Capital	6 000 00
C, Capital	2,000 00
C, Loan	500 00

The partnership went into liquidation All its assets were turned into cash, and losses were charged to a Loss on Liquidation account For each of the following cases, prepare a statement with columns as follows

A, Capital *B*, Capital *C*, Capital *C*, Loan Total

Enter the December 31st balances, show deductions for the loss on liquidation, show any transfers from *C*'s Loan account to his Capital account, and show the amounts paid to each partner as a distribution of cash on hand

Case 1 Loss on liquidation, $3,000 00, cash to divide, $13,500 00
Case 2 Loss on liquidation, $6,600 00 cash to divide, $9,900 00
Case 3 Loss on liquidation, $8,100 00, cash to divide, $8,400 00

ASSIGNMENT MATERIAL FOR CHAPTER 18

Questions

1. The *X* Corporation was organized with authorized capital stock of $100,000.00 divided into 1,000 shares of $100.00 par value each. Half the stock was sold at 90, and the following entry was made: Debit Cash and Credit Capital Stock, $45,000.00.

Have you any criticism of the above entry? How would you have recorded the facts?

2. What would be the journal entries pertaining to 1,000 shares of stock, $100.00 par value per share:

(a) When the stock is authorized?
(b) When subscriptions are received?
(c) When subscriptions are collected in full?

3. 500 shares of $100.00 par value stock are sold at 97 for cash. Give the journal entry to record the sale.

4. What basic rights does the ownership of shares of stock confer upon a stockholder? Are these rights always enjoyed proportionately by all classes of stockholders?

5. George Wilson owns a certificate for ten shares of stock in The *X* Corporation, and sells five shares to Frank Craig. Describe how these shares are transferred by Wilson and how the transfer is recorded on the books of the corporation.

6. On the books of a corporation with no par value stock, what account will show the total amount of stock authorized? What account will show the total amount of stock issued?

7. What entry should be made to record the authorization of 1,000 shares of no par value stock? What entry should be made to record the sale of 600 of these shares at $75.00 if no portion of the proceeds is to be regarded as paid-in surplus? How should the net worth, after the sale of these shares, be shown in the balance sheet?

Problems—Group A

Problem A-1. Homer Bradley and Isaac Morton organized the Braton Corporation on September 1, 19—. The authorized capitalization consisted of 1,000 shares of common stock of $100.00 par value per share.

Homer Bradley operated a store; his balance sheet on August 31 was as follows:

HOMER BRADLEY
Balance Sheet
August 31, 19—

Cash	$ 3,265.00	Accounts Payable	$ 6,289.00
Accounts Receivable	13,650.00	Homer Bradley, Capital	31,901.00
Inventory	21,275.00		
	$38,190.00		$38,190.00

Bradley subscribed for 350 shares of stock at par, in settlement of his subscription, he was to transfer to the corporation the net assets shown by the preceding balance sheet after creating a reserve for bad debts of $1 000 00 and to pay the remainder in cash

Isaac Morton owned real estate suitable for a store building he subscribed for 300 shares payment to be made by transferring the property to the corporation at the following valuations

Land	$ 5 000 00
Building	25 000 00

Bradley and Morton subscribed for their shares on September 1, and transferred the assets to the corporation on September 15

Subscriptions were received from two other men on September 1, as follows

Fred Catron	100 shares at 110
Herbert Walton	150 shares at 110

Catron and Walton paid half their subscriptions on September 1, and the remainder on September 15

No stock was issued until subscriptions were collected in full

Prepare entries in journal form to record all these facts and prepare the balance sheet of the company on September 15

Problem A-2. *A* and *B* organized the *A B* Company on June 1 with an authorized capitalization of 2 000 shares of no par value common stock The state in *which the company was incorporated* allowed *a portion of the proceeds of the sale* of stock to be credited to a surplus account It was agreed that $50 00 of the issuing price of each share should be regarded as fixed capital

A subscribed for 500 shares of stock at $60 00 per share to be paid for as follows 250 shares to be paid for immediately by the transfer of merchandise to the corporation, and the remainder to be paid for on July 1 in cash

B also subscribed for 500 shares at $60 00 per share to be paid for immediately in cash

Prepare entries in journal form to record the June 1 transactions and submit the net worth section of the company s balance sheet as of that date

Prepare journal entries to record the July 1 transaction and submit the net worth section of the company s balance sheet as of that date

On December 31 the books were closed and the net profit was found to be $6 000 00 On that date, 100 shares of stock were sold to *C* for $70 00 per share Submit the entry in journal form, to record the issuance of stock to *C*, and show the net worth section of the balance sheet on December 31

Problems—Group B

Problem B-1 The Peerless Corporation was organized on January 1, 19— and was authorized to issue 1,000 shares of $100 00 par value stock Give entries in journal form to record the sale of the entire issue under the following conditions

(a) 1 000 shares were sold at par for cash.
(b) " " " " " 85 " "
(c) " " " " " 110 " " .

Problem B-2. The *Z* Corporation was organized on January 1, 19—, and was authorized to issue 1,500 shares of no-par stock. Give entries in journal form to record the sale of the entire issue under the following conditions:

(a) 1,500 shares were sold at 65, all the proceeds being regarded as fixed capital.
(b) 1,500 shares were sold at 65, $15.00 per share being regarded as paid-in surplus.

Problem B-3. The Dowell Corporation was authorized on January 1, 19—, to issue 5,000 shares of $100.00 par value stock, but it did not sell the shares immediately. On January 4, subscriptions for 2,000 shares at par were received. On January 7, subscriptions for 1,000 more shares at 105 were received. On January 15, one half the January 4 subscriptions were collected in full, and the shares were issued. On January 25, the January 7 subscriptions were collected in full, and the shares were issued.

Give entries in journal form to record the above facts. Post them to ledger accounts and prepare a balance sheet, assuming that the unpaid subscriptions will be collected in the near future.

Problem B-4. The Noble Corporation was authorized on January 1 to issue 2,500 shares of no-par stock. The directors decided to consider $50.00 of the receipts from the sale of each share as fixed capital. On January 5, 500 shares were sold for cash at $50.00 per share. On January 10, subscriptions were received for 1,000 shares at $60.00 On January 13, subscriptions were received for 500 shares at $65.00. On January 23, the January 10 subscriptions were collected in full and certificates were issued. On January 28, half the January 13 subscriptions were collected. Since subscriptions for these shares were not collected in full, certificates were not issued.

Give entries in journal form to record these facts. Post them to ledger accounts and prepare a balance sheet.

ASSIGNMENT MATERIAL FOR CHAPTER 19

Questions

1 (a) In what two general ways may stock be preferred?

(b) What is meant by the words *Cumulative* and *Participating* as applied to preferred stock?

2 Under what circumstances would the ownership of common stock be preferable to the ownership of preferred stock?

3 A corporation has 1 000 authorized and outstanding shares of 6% participating cumulative preferred stock of $100 00 par value per share, 1 000 authorized and outstanding shares of common stock of $100 00 par value per share, and a surplus of $50 000 00 How would this condition be shown in the net worth section of the balance sheet?

4 State the purpose of

(a) The subscribers' ledger
(b) The stockholders ledger
(c) The minute book

5 A partnership decides to incorporate Describe the accounting procedure

(a) If the partnership books are retained by the corporation
(b) If the corporation opens new books

6 Does the par value of stock represent its real value?

7 If you purchased a share of no-par common stock for $60 00, and two years later another purchaser acquired a share of the same stock for $45 00, would you necessarily believe that the second purchaser made a more advantageous purchase than you did?

8 The X Corporation with authorized and issued capital stock of 1,000 shares of preferred and 1,000 shares of common, all of $100 00 par value has a deficit of $100,000 00

(a) Draw up the net worth section of the balance sheet of The X Corporation

(b) What is the book value per share of The Y Corporation's common stock?

Problems—Group A

Problem A-1 Using the following information, prepare a statement showing the dividend payments of The Weston Company during each of the first five years of operation

Capitalization

Preferred stock $100 00 par value 6%, participating with the common stock to the extent of 3% above the 6% preference rate, and cumulative, 1 000 shares outstanding

Common stock $100 00 par value, 1,000 shares outstanding

Earnings:

Year	Total Profit	Portion of Year's Profit Retained in Surplus	Total Surplus at End of Year
First...	$28,000.00	$6,000.00	$ 6,000.00
Second.	15,000.00	3,000.00	9,000.00
Third	4,000.00	—	9,000.00
Fourth	25,000.00	3,000.00	12,000.00
Fifth...	20,000.00	5,000.00	17,000.00

Problem A-2. The *L* Corporation was incorporated on August 1 with an thorized capital consisting of 5,000 shares of 7%, cumulative preferred stock of 00.00 par value, and 2,000 shares of common stock of $50.00 par value. Subriptions to the stock were received on August 1 as follows:

Subscriber	Preferred Stock Subscriptions: Shares	Price	Amount	Common Stock Subscriptions: Shares	Price	Amount	Subscriptions Collected
I. D. Bowen.	400	$100.00	$ 40,000.00	300	$47.00	$14,100.00	$ 54,100.00
rank Holm..				200	48.00	9,600.00	9,600.00
Geo. Snyder..	600	98.00	58,800.00	100	47.00	4,700.00	63,500.00
Alfred Slade..	900	99.00	89,100.00	200	48.00	9,600.00	98,700.00
Ross Dolan...				100	49.00	4,900.00	4,900.00
Robert Cox...	300	101.00	30,300.00				30,300.00
N. F. Carmen	500	102.00	51,000.00				51,000.00
Edwin Smith.				175	46.00	8,050.00	8,050.00
Don Ayres...	300	100.00	30,000.00	25	45.00	1,125.00	31,125.00
Total......	3,000		$299,200.00	1,100		$52,075.00	$351,275.00

Collections of subscriptions were received on August 10.

Bowen's payment was made with land valued at $40,000.00, and cash for the remainder.

Alfred Slade made his payment as follows:

Merchandise valued at...	$40,000.00
His personal note for	20,000.00
Cash.....	38,700.00

Don Ayres gave in payment a building valued at $20,000.00, subject to a mortgage of $10,000.00, delivery equipment valued at $5,000.00, and cash for the remainder.

All other collections on subscriptions were received in cash.

Prepare the journal entries to record:

(a) Authorization of capital stock.

(b) Subscriptions. (Make only two entries for the subscriptions in tabulated form—one for the subscriptions to common stock and one for the subscriptions to preferred stock. Show details in the explanation.)

(c) Receipts of assets on subscriptions. (Make individual entries for the subscribers who paid in assets other than cash. Make only one entry for the cash receipts from all the other subscribers, show details in the explanation.)

(d) Make one entry for the issuance of preferred shares and one entry for the issuance of common shares Show details in the explanations

Problem A-3 Two partnerships Rogers & Smith and Vaner & Pelley decided to merge and incorporate as Home-Owned Stores The corporation was organized with an authorized capitalization of 2 500 shares of $100 00 par value common stock and acquired all the assets and assumed all the liabilities of the two partnerships The balance sheets of the partnerships on June 30 19— were as follows

	Rogers & Smith	Vaner & Pelley
Assets		
Cash	$ 5 000 00	$ 26 000 00
Accounts Receivable	19 200 00	27 000 00
Inventory	21 000 00	52 000 00
Delivery Equipment	1 200 00	13 000 00
Furniture and Fixtures	6 200 00	16 100 00
	$52 600 00	$134 100 00
Liabilities and Net Worth		
Accounts Payable	$15 000 00	$ 20 000 00
Notes Payable	9 200 00	30 000 00
Capital		
Rogers	14 180 00	
Smith	14 220 00	
Vaner		50 000 00
Pelley		34 100 00
	$52 600 00	$134 100 00

Profit and loss ratios were as follows

Rogers	40%	
Smith	60	
Vaner		66⅔%
Pelley		33⅓

The assets were taken over by the corporation on the following bases

	Rogers & Smith	Vaner & Pelley
Cash	Book value	Book value
Accounts Receivable	Book value	$25 000 00*
Inventory	Book value	48 000 00
Delivery Equipment	$1 000 00	12 700 00
Furniture and Fixtures	Book value	14 000 00
Goodwill	$21 000 00	—

* Adjust the book value by establishing a reserve

Make journal entries to close the books of the two partnerships

Problem A-4 Make entries in journal form to record the facts of Problem A-3 on the books of the corporation and prepare the corporation's balance sheet as of the beginning of business

The new corporation to be known as the Easy Products Co., is authorized to issue 2,000 shares of $50.00 par value stock. Before the corporation takes over the assets, the valuation of delivery equipment is to be reduced to $2,500.00 by establishment of a reserve for depreciation.

Give entries in journal form on the partnership books

(a) Assuming the partnership books are to be retained by the corporation.

(b) Assuming the partnership books are to be closed.

ASSIGNMENT MATERIAL FOR CHAPTER 20

Questions

1. What two methods are acceptable for balance sheet presentation of an unrealized increment in the value of a fixed asset, shown by an appraisal?

2. What is the "clean surplus" theory?

3. What disposition should be made of organization expenses?

4. How should the following be shown in the balance sheet?
   Discount on Stock.
   Unissued Stock.
   Uncollected Subscriptions.
   Organization Expense.

5. What are the four essential characteristics of treasury stock?

6. Why should the following items not be regarded as treasury stock by the X Company?
   (a) U. S. Steel stock purchased as an investment.
   (b) Unissued stock held for issuance to employees.

7. Which would you prefer to purchase from a corporation for $90.00?
   (a) A share of unissued stock of a par value of $100.00.
   (b) A share of treasury stock of the same class.

8. A company has authorized and issued 1,000 shares of capital stock of $100.00 par value per share. How would 100 shares of treasury stock, purchased by the company at par, be shown in the balance sheet?

9. 50 shares of stock of $100.00 par value are purchased by the issuing company at 90. They are later sold at 105. Give the journal entries to record these transactions.

10. Under what conditions might a corporation prefer to declare a stock dividend rather than a cash dividend?

Problems—Group A

Problem A-1. The following balances appear in the after-closing trial balance of Handover Manufacturing Company on July 31, 19—:

Subscriptions Receivable—Common .	$ 25,000.00	
Subscriptions Receivable—Preferred.	85,000.00	
Dividends Payable—Common. . . .		$ 11,520 00
Treasury Stock—Common	8,960.00	
Treasury Stock—Preferred . . .	12,600 00	
Discount on Stock—Common.	8,600 00	
Unissued Stock—Common	200,000 00	
Unissued Stock—Preferred	200,000 00	
Organization Expense	13,200.00	

Common Stock Authorized	400 000 00
Preferred Stock Authorized	350 000 00
Earned Surplus	50 000 00
Capital Surplus	27 700 00
Subscribed Stock—Common	50 000 00
Subscribed Stock—Preferred	100 000 00

Both classes of stock have a par value of $100 00 per share

The preferred stock carries a preference rate of 6% it is cumulative and non participating There are no dividends in arrears It is preferred as to assets at par and dividends in arrears

The treasury stock of both classes is carried at cost 80 shares of common stock and 120 shares of preferred stock are held Under the law of the state of incorporation the earned surplus is restricted to the extent of the cost of the treasury stock

The common stock subscriptions are due on August 15 The preferred stock subscriptions are due November 30

Show how the above balances should appear in the company s balance sheet

Problem A 2 Draft the journal entries necessary to record the following transactions on the books of the Handover Manufacturing Company subsequent to July 31 19—

Aug 15—Collected the common stock subscriptions due today

27 Sold 30 shares of common treasury stock at 115

30—Paid the $11 520 00 dividend on common stock

Oct 5—K B Downing purchased 100 shares of the unissued preferred stock for cash $10 200 00

Nov 30—The preferred stock subscriptions were collected today

Dec 15—70 shares of the preferred treasury stock were issued to a creditor in payment of his account The stock was accepted by him at 103

Feb 28—The directors declared dividends on all outstanding shares as follows

Preferred—6%
Common—7

Mar 20—The dividends were paid

July 31—By order of the board of directors the organization expense was written off

Problem A 3 Record the following transactions Compute the profit or loss on each sale of treasury stock on the assumption that the first shares acquired were the first shares sold

Aug 1—Purchased 100 shares of treasury stock at $120 00 per share

6—Purchased 50 shares at $123 00 per share

10—Sold 75 shares at $127 00 per share

12—Acquired 60 shares at $125 50 per share in settlement of an account receivable

15—Sold 120 shares at $128 50 per share

19—The stockholders donated 35 shares to the company

23—Sold 45 shares at $130 00

Problems—Group B

Problem B-1. A corporation was organized under a state law which provides that no portion of the issuing price of no-par stock may be credited to Surplus and which restricts dividends to the amount of surplus minus the cost of treasury stock. The corporation issued 1,000 shares of no-par stock at $25.00 per share, and subsequently issued an additional 1,000 shares at $30.00 per share. John Smith acquired 100 shares of the first issue by subscription, and 100 shares of the second issue by purchase from Fred White. Smith turned in the certificates and obtained a new certificate for 200 shares. He subsequently sold 100 shares to the company for $28.50 per share. How should the company record the purchase of the treasury stock?

Problem B-2. Following are the balances of a number of accounts which appeared on the books of the Joslyn Corporation on June 30, 19—:

Capital Stock Authorized (par value $100.00 per share)		$100,000.00
Unissued Stock	$21,000.00	
Treasury Stock—at par	1,000.00	
Premium on Purchase of Treasury Stock	125.00	
Capital Surplus		16,295.00
Earned Surplus		89,614.00
Subscriptions to Capital Stock	5,500.00	
Capital Stock Subscribed		11,000.00
Organization Expense	2,840.00	
Dividends	4,500.00	
Dividends Payable		4,500.00
Stock Dividends Payable		9,000.00
Write-up of Plant Properties		26,000.00
Premium on Stock		14,000.00
Discount on Stock	2,000.00	
Profit on Sales of Treasury Stock		3,500.00

The surplus is restricted in an amount equal to the cost of the treasury stock.

The bookkeeper thought that treasury stock should be carried at par. The entries he made to record the purchase and sale of treasury stock were:

Treasury Stock	10,000.00	
Premium on Purchase of Treasury Stock	1,250.00	
Cash		11,250.00
To record the purchase of 100 shares of stock at $112.50 per share.		
Cash	13,625.00	
Treasury Stock		9,000.00
Premium on Purchase of Treasury Stock		1,125.00
Profit on Sales of Treasury Stock		3,500.00
To record the sale of 90 shares of treasury stock.		

Prepare a partial balance sheet.

Problem B-3. Three partners, with capitals of $10,000.00 each, incorporated their business (taking $10,000.00 of stock each) but continued the partnership books. Profits the first year were shown by the books as $8,000.00. The three men, acting as corporate directors, had authorized salaries to themselves, as cor-

poration officers of $2 000 00 each No entries were made for these salaries. The balance sheet at the end of the year is presented in condensed form below

Net Assets	$35 500 00	*A* Capital	$11 000 00
		B Capital	9 900 00
		C Capital	14 600 00
	$35 500 00		$35 500 00

The capital balances were determined as follows

	A	*B*	*C*
(a) Original investments	$10 000 00	$10 000 00	$10 000 00
(b) Additional investment (for which stock was issued)			5 000 00
(c) Profits	4 000 00	2 400 00	1 600 00
Total	$14 000 00	$12 400 00	$16 600 00
(d) Less drawings	3 000 00	2 500 00	2 000 00
Balances	$11 000 00	$ 9 900 00	$14 600 00

Set up a corrected balance sheet

Problem B-4 A company s trial balance on December 31 1949 contained the following balances

Sales		$315 620 00
Inventory (December 31 1918)	$ 60 875 00	
Purchases	217 920 00	
Expenses	55 290 00	
Discount on Sales	1 215 00	
Profit on Sales of Investments		1 263 00
Loss on Sale of Machinery	1 926 00	
Dividends	10 000 00	
Surplus		80 370 00

The inventory at the end of 1949 was valued at $63 190 00
Prepare

(a) A statement of profit and loss and a statement of surplus in which extraneous profits and losses are not regarded as affecting the net income for the year
(b) A combined statement of profit and loss and surplus in which extraneous profits and losses are not regarded as affecting the net income for the year
(c) A combined statement of profit and loss and surplus prepared in accordance with the clean surplus theory

ASSIGNMENT MATERIAL FOR CHAPTER 21

Questions

1. Define:
   (a) Real estate mortgage bonds.
   (b) Chattel mortgage bonds.
   (c) Collateral trust bonds.
   (d) Debenture bonds.

2. Into what three groups may bonds be classified on the basis of registry?

3. Discuss the relative advantages of unregistered and registered bonds, from the point of view of (a) the issuing corporation, and (b) the bondholder.

4. A $500,000.00 bond issue has been authorized, but only $300,000.00 of the bonds have been sold. How should these facts appear in the balance sheet?

5. Unissued bonds of a face value of $5,000.00, bearing 6% interest, are sold at 101 one month after the interest payment date. Give the entry or entries required to record this transaction.

6. From the bondholders' standpoint, what is the object of:
   (a) The sinking fund provision?
   (b) The sinking fund reserve provision?

7. What is the difference in the nature of a sinking fund reserve and a depreciation reserve?

8. Why are bond discount and bond premium written off to the Interest Expense account over the life of the bonds?

9. Where do the following appear on the balance sheet?

   Unissued Bonds.
   Sinking Fund Cash.
   Sinking Fund Securities.
   Bond Discount.
   Bond Premium.
   Accrued Bond Interest.
   Sinking Fund Reserve.
   Bonds Payable.

10. What disposition should be made of the following accounts at the maturity of a bond issue?

    Sinking Fund Reserve.
    Sinking Fund.
    Bond Premium or Discount.

Problems—Group A

Problem A-1. Prepare entries in journal form to record the following matters:

Jan. 31, 1949—An issue of $250,000.00, 20-year, 5%, first mortgage, registered bonds was authenticated on this date. The interest is payable January 31 and July 31.

According to the terms of the trust deed, a sinking fund shall be created by depositing $12,500 00 with Northern National Bank, trustee, at the end of the fiscal year (January 31, 1950), the trustee shall immediately invest the fund in securities from a specified list, at the end of each subsequent fiscal year during the life of the bonds, a deposit shall be made which, together with the net income earned on the fund during the year, shall increase the fund $12 500 00 a sinking fund reserve shall be established by appropriating $12 500 00 from profits each January 31, during the life of the bonds beginning January 31, 1950

Feb 1, 1949—The entire issue of authorized bonds was sold at 101

July 31, 1949—An amount sufficient to pay the entire bond interest was deposited with the Western National Bank in a special account and the company immediately drew checks against this account in payment of the bond interest

Jan 31, 1950—The semiannual bond interest was paid on this date The company also made the required sinking fund reserve entry and the sinking fund deposit with the Northern National Bank

July 31, 1950—Bond interest was paid

Jan 31, 1951—Bond interest was paid
Received a report from the Northern National Bank, as follows

Income from securities	$500 00
Less expenses and commission	100 00
Net income added to sinking fund	$400 00

The company made the sinking fund reserve entry and contributed the necessary amount to the sinking fund

Problem A-2 Bonds of $100,000 00 face value, bearing 6% interest payable semiannually and due in 10 years were authorized on January 1 They were sold on March 1 at 103 and accrued interest Give entries in journal form to record
The authorization of the bonds
The sale of the bonds
The payment of interest and the amortization of premium on June 30

Problem A-3 On December 31, 1949, The Phillips Company authorized an issue of $500 000 00 of bonds secured by a first mortgage on the company's land and buildings The bonds bore interest at 5% per annum, payable semiannually on June 30 and December 31, and were due on December 31, 1969

Sales of bonds were made as follows

January 1, 1950—$300 000 00 at 102
March 1, 1951—$100,000 00 at par and accrued interest

On June 30 and December 31 of each year, the company deposited funds in the Bank of Commerce for the payment of the bond interest, on each subsequent July 31 and January 31, the bank reported that all coupons had been presented and paid

The indenture provided that a sinking fund should be created by deposits, on December 31 of each year of the life of the bond issue, computed in the manner stated on the following page

"The annual required increase in the sinking fund applicable to each issuance of bonds shall be an amount determined by dividing the face value of the bonds of each issuance by the number of years between January 1st of the year of issuance and December 31, 1969. From each annual total of the required sinking fund increases applicable to all issuances, there shall be deducted the increment since the last deposit resulting from income and profits on sinking fund securities, and the remainder shall be the required annual sinking fund deposit."

The company made sinking fund deposits on December 31st of each year in accordance with the requirements of the indenture.

The sinking fund trustee reported the following during 1951:

Purchase of sinking fund securities on January 5, 1951, $14,890.00.
Sale of these securities on August 10, 1951 for $15,200.00.
Purchase of securities on August 16, 1951, $15,000.00.
Interest earned on sinking fund securities during 1951, $713.25.

The indenture also required that a sinking fund reserve should be maintained by a transfer from Earned Surplus on December 31st of each year of an amount sufficient to raise the balance in the reserve to the amount of the required balance of the fund on that date. The company complied with this requirement.

Give entries in journal form to record all transactions to December 31, 1951, including the authorization of the bonds; the sales of bonds; the deposits of funds for the payment of interest; the payment of interest; the amortization of bond premium; the sinking fund deposits; the sinking fund securities profits and income; and the transfers to the sinking fund reserve.

Also prepare a partial balance sheet as of December 31, 1951, showing all balances (except general cash) resulting from recording the above-stated facts, as well as capital stock of $750,000.00, and earned surplus of $123,540.00 after setting up the sinking fund reserve.

Problems—Group B

Problem B-1. $100,000.00 of 6%, 5-year bonds, with interest payable semi-annually on June 30 and December 31, were authorized on December 31, 1949. The entire issue was sold at par plus accrued interest on February 28, 1950. Prepare entries in journal form to record the authorization and sale of the issue and the first interest payment.

Problem B-2. $50,000.00 of 7%, 10-year collateral trust bonds were authorized on June 30, 1949. Interest was payable semiannually on December 31 and June 30. $25,000.00 of the bonds were sold on September 30 at 110 plus accrued interest. Give journal entries to record the authorization of the bonds, the sale of the bonds, and the interest payment and premium amortization on December 31.

Problem B-3. A company has $250,000.00 of 5½% bonds outstanding. The bonds are unregistered and interest is paid semiannually through the X Bank. On June 29, the company deposited the required funds for payment of the interest. On July 31 the bank reported that 90% of the interest had been paid. Give entries in journal form for June 29, June 30, and July 31.

Problem B-4. The *A* Company issued $50,000 00 of 6%, 10-year bonds on June 30, 1949 The provisions of the indenture required the establishment of a sinking fund which was to be increased $5,000 00 each year, as well as a sinking fund reserve which was to be increased $5,000 00 each year, until the bonds were retired

In accordance with the above provisions, The *A* Company made its first payment into the sinking fund on June 30, 1950 On June 30, 1951 the trust company reported a net income of $250 00 from sinking fund securities, and The *A* Company made its annual payment accordingly

On July 15 1959, The *A* Company was notified by the trust company that the bond issue had been retired and that there was $450 00 left in the sinking fund, as profit from the sale of sinking fund securities

Prepare the necessary entries in journal form for June 30, 1950, June 30, 1951, and July 15, 1959, assuming that The *A* Company kept only one Sinking Fund account

ASSIGNMENT MATERIAL FOR CHAPTER 22

Questions

1. What are the three elements of manufacturing cost?

2. Distinguish between direct labor and indirect labor.

3. In which element of manufacturing cost would the following be classified?
   (a) Floor sweeping material.
   (b) Wages paid the factory timekeeper.
   (c) A machine operator's wages.
   (d) Lumber to be used in making chairs to be sold.
   (e) Lumber to be used in making chairs for the office.
   (f) First aid kit for the factory.
   (g) Towels for the office.
   (h) Parts to be used in a machine to be sold.

4. How do the working papers of a manufacturing business and those of a trading business differ?

5. What is the difference between the profit and loss statement of a manufacturing company and that of a trading company?

6. Why is it important to separate manufacturing expense from selling and general expenses?

7. The *X* Machinery Co. manufactured a machine for use in its own furnace room. At what figure should the machine be set up in the fixed asset account?
   Materials cost.
   Prime cost (materials plus direct labor).
   Total manufacturing cost (materials, labor, and overhead).
   Selling price.
   The price at which the *X* Machinery Co. would be able to purchase the machine elsewhere.

Problems—Group A

Problem A-1. Following is a trial balance of The Pardee Company on December 31, 19—.

Cash	44,787.50
Notes Receivable	2,400.00
Accounts Receivable	250,900.00
Inventories (January 1, 19—):	
Raw Materials	27,000.00
Goods in Process	25,000.00
Finished Goods	30,000.00
Land	25,000.00
Buildings	50,000.00
Machinery	40,000.00
Tools	7,000.00
Patterns	5,000.00
Patents	30,000.00
Furniture and Fixtures	5,700.00

Reserves for		
Depreciation—Buildings		5,250 00
Depreciation—Machinery		12,500 00
Depreciation—Furniture and Fixtures		2,500 00
Expiration—Patents		7,500 00
Bad Debts		13,000 00
Notes Payable		87,000 00
Accounts Payable		42,800 00
Bonds Payable		50,000 00
Capital Stock		200,000 00
Earned Surplus (January 1, 19—)		60,520 00
Sales		1,290,000 00
Returned Sales	42,000 00	
Purchases of Raw Materials	520 000 00	
Freight In	23 000 00	
Direct Labor	399,500 00	
Indirect Labor	52 000 00	
Insurance—Buildings	400 00	
Insurance—Machinery and Equipment	700 00	
Taxes—Real Estate	4,100 00	
Power and Light	23,700 00	
Repairs—Buildings	950 00	
Repairs—Machinery	1,310 00	
Factory Expense	3,010 00	
Employers' Liability Insurance	4,500 00	
Commissions and Salaries—Salesmen	43 000 00	
Traveling Expense—Salesmen	17,500 00	
Cartage and Express Out	5,750 00	
Freight Out	11,000 00	
Insurance—Merchandise	900 00	
Office Payroll	18,000 00	
Officers' Salaries	15,000 00	
Postage	2,000 00	
Telephone and Telegraph	1,800 00	
Collection and Exchange	700 00	
Stationery and Printing	3,250 00	
Bonding Office Employees	250 00	
Bad Debt Provision	9,400 00	
Interest—General	6,600 00	
Interest on Bonds	2,062 50	
Sales Discount	15,900 00	
	1,771,070 00	1,771 070 00

The following data must also be taken into consideration

Inventories, December 31, 19—	
Raw materials	$25 500 00
Goods in process	20,000 00
Finished goods	30,000 00
Tools	4,500 00
Patterns	3 000 00
Stationery and printing	400 00
Depreciation and amortization rates	
Buildings	4%
Machinery	10
Furniture and fixtures	10
Patents	6

Accruals:	
Interest on bonds	$ 687.50
General interest	400.00
Real estate taxes	480.00
Unexpired insurance:	
Buildings	150.00
Machinery and equipment	200.00
Merchandise	210.00
Employers' liability	900.00
Unpaid wages:	
Direct	10,300.00
Indirect	3,000.00
Prepaid interest on notes payable	500.00

The bad debt provision is to be adjusted to 1% of net sales.
A 5% cash dividend on the outstanding stock was declared, payable January 10.
The following expense accounts should be apportioned as indicated:

	Manufacturing	Selling	General
Insurance—Buildings	95%		5%
Taxes—Real Estate	95		5
Power and Light	90	5%	5
Repairs—Buildings	95		5
Employers' Liability Insurance	$3,000.00	$200.00	$400.00
Insurance—Merchandise	350.00	340.00	
Telephone and Telegraph		50%	50%
Depreciation—Buildings	95%		5
Depreciation—Furniture and Fixtures		25	75

Prepare:
(1) Working papers.
(2) Statement of cost of goods manufactured.
(3) Statement of profit and loss.
(4) Statement of earned surplus.
(5) Balance sheet.
(6) Adjusting and closing entries.
(7) The Manufacturing and Profit and Loss ledger accounts.

Problems—Group B

Problem B-1. Following is a trial balance of the ledger of the Rowan Manufacturing Co. Adjustments for accrued and deferred items and for bad debt and depreciation reserve provisions were posted to the ledger before the trial balance was drawn off. The books have not been closed for a year. Prepare working papers.

ROWAN MANUFACTURING CO.
Trial Balance
December 31, 1949

Cash	11,000.00	
Accounts Receivable	56,500.00	
Reserve for Bad Debts		4,500.00

Finished Goods Inventory	31,000 00	
Goods in Process Inventory	12,000 00	
Raw Materials Inventory	20,000 00	
Machinery and Equipment	50 000 00	
Reserve for Depreciation—Machinery and Equipment		12 500 00
Furniture and Fixtures	20 000 00	
Reserve for Depreciation—Furniture and Fixtures		7,500 00
Unexpired Insurance	2 800 00	
Prepaid Advertising	1,200 00	
Accounts Payable		34,300 00
Accrued Interest Payable		900 00
Accrued Salaries and Wages		12 600 00
Mortgage Payable		30 000 00
Capital Stock		75,000 00
Earned Surplus		14,700 00
Sales		205,500 00
Returned Sales and Allowances	3,500 00	
Purchases	54,000 00	
Returned Purchases and Allowances		3,000 00
Freight In	2 000 00	
Direct Labor	40 000 00	
Indirect Labor	14,000 00	
Heat, Light, and Power	2,000 00	
Factory Rent	6 000 00	
Factory Insurance	1,200 00	
Depreciation—Machinery and Equipment	5,000 00	
Miscellaneous Manufacturing Expense	1,800 00	
Advertising	4,000 00	
Freight Out	2,500 00	
Salesmen s Salaries	12,500 00	
Delivery Expense	4 000 00	
Miscellaneous Selling Expense	1,000 00	
Officers' Salaries	18 000 00	
Office Salaries	6,000 00	
Stationery and Supplies	1,400 00	
Bad Debts	3 600 00	
Depreciation—Furniture and Fixtures	2,000 00	
Miscellaneous General Expense	1 000 00	
Discount on Purchases		1,100 00
Discount on Sales	2,300 00	
Interest Expense	1,800 00	
Dividends	7 500 00	
	401,600 00	401,600 00

Inventories, December 31 1949

Finished Goods	$25,500 00
Goods in Process	17,500 00
Raw Materials	18,000 00

Problem B-2 Referring to Problem B-1,

(a) Prepare a Statement of Cost of Goods Manufactured
(b) Prepare a Statement of Profit and Loss

Problem B-3 Referring to Problem B-1,

(a) Prepare journal entries to close the books
(b) Present the Manufacturing account and the Profit and Loss account.

ASSIGNMENT MATERIAL FOR CHAPTER 23

Questions

1. What is the disadvantage of numbering the accounts consecutively when the books are opened?

2. What advantages result from the use of expense controlling accounts?

3. If expense controlling accounts are kept and special columns are provided therefor in the voucher register, how should expenses be recorded and how should postings be made?

4. Can the subsidiary expense records be operated without special columns in the voucher register?

5. If expense controls are used, what is the purpose of the summary of expenses prepared from the subsidiary expense records at the end of the month?

6. What kinds of entries affecting the expense analysis records are likely to be made in books of original entry other than the voucher register? How will such entries be posted?

7. Under what circumstances can the Account Number and the (√) columns be eliminated in the expense controlling account sections of the voucher register?

8. Which procedure do you consider preferable:
   (a) Using the journal as a book of original entry for the receipt of notes receivable and the issuance of notes payable, and using the note registers merely as detailed records subsidiary to the note accounts in the ledger?
   (b) Using the note registers as books of original entry for the receipt and issuance of notes?

9. When the note registers are used as books of original entry:
   (a) Are special columns for the note controlling accounts required in the journal? Why?
   (b) Are special columns required in the cash books? Why?

Practice Set

This practice set consists of the transactions of Lane-Madison Corporation for the month of August. The current year should be used in all dates.

Chart of Accounts. Subsidiary Records.

Charts of the general ledger accounts and the subsidiary expense accounts appear on the inside of the covers of the general ledger and the books of original entry. The general ledger contains the following controlling accounts:

1120—Accounts Receivable:

This account will control an accounts receivable subsidiary ledger. You will not be required to keep this subsidiary ledger; it is assumed that it will be kept by an assistant bookkeeper.

2120—Vouchers Payable

You will keep the voucher register

1130—Notes Receivable
2130—Notes Payable

These accounts will control note registers, which you will keep

5300—Manufacturing Expense—Control

This account will control an expense analysis record, or distribution sheet, containing columns for the subsidiary manufacturing expense accounts shown in the chart of accounts It is assumed that postings to this expense analysis record will be made by an assistant

6000—Selling Expense—Control

This account will control an expense analysis record to which you will make postings

7000—General Expense—Control

This account will control an expense analysis record to which, it is assumed, postings will be made by an assistant

Books of Original Entry

The following books of original entry will be used:

Books you are to keep
- Voucher register
- General cash receipts book
- Cash disbursements book (check register).
- Notes receivable register
- Notes payable register
- General journal

You will post all entries in these books (except to the subsidiary accounts receivable ledger and to the manufacturing and general expense analysis *records, as indicated above) and will post column totals at the end of the* month

Books to be kept by an assistant bookkeeper.
- Cash receipts from customers book
- Sales book
- Returned sales and allowances book

You will post column totals from these books at the end of the month.

Payroll summary
- This will be prepared by the assistant bookkeeper, postings will be made by you
- At some time before the payroll entries (in the assignment with Chapter 25) are made, you should read the appendix dealing with payroll deductions and taxes

Postings, except column totals, should be made daily.

Transactions

(The numbers in parentheses are transaction numbers.)

August 1:

(1) Lane Brothers have been in business for some time, operating as a partnership. They are short of working capital. Joseph Madison agrees to make an investment in the business, provided it is organized as a corporation. Lane-Madison Corporation is organized with an authorized capital of 1,000 shares of 8% nonparticipating preferred stock, and 7,500 shares of common stock. Both classes of stock have a par value of $100.00 per share. Make entries to record the authorized stock issues.

(2) Subscriptions to stock are received at par as follows:

	Number of Shares	
	Preferred	Common
John Lane		2,750
Robert Lane		1,750
Joseph Madison	500	

Make proper entries in the Subscriptions and Stock Subscribed accounts.

(3) Collected half of Madison's subscription to preferred stock. Stock certificates are issued for the amounts collected.

(4) In partial settlement of the stock subscriptions of John and Robert Lane, the corporation takes over the assets and assumes the liabilities of the partnership of Lane Brothers. The assets and liabilities taken over, and the partners' interests therein, are as follows:

Assets:		
Cash		$ 1,543.89
Accounts receivable	$ 16,763.42	
Less reserve for bad debts	597.90	16,165.52
Finished goods		64,854.35
Goods in process		34,317.83
Materials		58,930.62
Land		52,000.00
Buildings		142,000.00
Machinery and equipment		168,000.00
Tools		2,100.00
Trucks		6,000.00
Office furniture		4,800.00
Patents		9,000.00
Goodwill		20,000.00
Total assets		$580,042.21
Liabilities:		
Accounts payable	$ 13,226.46	
Notes payable	75,000.00	
Accrued interest on notes payable	233.33	
Mortgage payable—land and buildings—6%	50,000.00	
Mortgage payable—machinery and equipment—5%	60,000.00	
Accrued interest on mortgages payable	1,250.00	
Total liabilities		199,709.79
Partners' interests:		
John Lane	$220,026.23	
Robert Lane	160,306.19	$380,332.42

(a) Make a journal entry recording all the assets except cash, and all the liabilities except notes payable and vouchers payable and crediting account 2201—Lane Brothers When the interest on the notes payable is paid, account 8235—Sundry Interest Expense will be charged, therefore, credit the accrued interest on notes payable to this account When the interest on the mortgages is paid, account 8240—Mortgage Interest will be charged, therefore, credit the accrued interest on the mortgages to this account

(b) Make an entry for the cash in the general cash receipts book, crediting account 2201

(c) The $75,000 00 liability on notes payable is detailed as follows

Date	Payee	Time	Interest Rate	Face
July 7	Citizens State Bank	90 days	6%	$25,000 00
15	First State Bank	60	6%	50 000 00
				$75 000 00

Record these notes in the notes payable register, debiting account 2201

(d) The accounts payable totaling $13,226 46 represent items which are to be recorded in the voucher register as follows

Voucher Register

Voucher No	Date		Issued to	Terms	Vouchers Payable 2120	Sundry Accounts Debit	
						Acct No	Amount
	19—						
1	Aug	1	Bolton Wire Company	Due Aug 9	3,976 30		
2		1	Morris and White, Inc	Due Aug 5	6,134 90	2201	13 226 46
3		1	Duncombe Foundries	Due Aug 2	3,115 26		

The voucher register illustrated above contains only those columns required for the entries under consideration

(e) Your assistant has opened an account in the subsidiary accounts receivable ledger with each of the debtors listed below

C E Bruce	$ 8,124 30
J C Burns	3,215 60
C W Finley	219 80
C L Murphy	113 85
Rowley and Company	1,762 85
Stinson Motor Sales	3,327 02
	$16,763 42

(f) Make a journal entry debiting Lane Brothers and crediting Subscriptions to Common Stock for the portion of the subscriptions paid by the transfer of the net assets of the partnership

(g) Common stock certificates are issued to John and Robert Lane for the *portions of their subscriptions fully paid by the transfer of the partnership* net assets The shares were issued to each in accordance with his interest in the net assets 2,200 shares to John Lane and 1,603 shares to Robert Lane

August 2:

(5) Notes receivable due in 20 days* and bearing 6% interest are received from John Lane and Robert Lane for the portions of their stock subscriptions not covered by their capital interests in the net assets taken over from the partnership.

Stock certificates are issued to John Lane and Robert Lane for the amounts of stock subscribed for by them and not issued yesterday.

(6) Buy coal from Niles Fuel and Material Company, $3,2[illegible].80, terms, net 30 days. (Charge account 5315.)

(7) Pay the Duncombe Foundries voucher less 2% cash discount.

* In order to compress within the limits of one month the transactions which it is desired to include in this practice set, the time periods of notes are unusually short.

ASSIGNMENT MATERIAL FOR CHAPTER 24

Questions

1 What is the purpose of a petty cash fund? Describe the procedure of setting up and operating a petty cash fund

2 If a petty cash fund is operated is a petty cash book necessary?

3 If a company operates a payroll bank account by drawing a check on the regular bank account for the exact amount of the payroll and depositing this check in the payroll bank account what would be indicated by

(a) A balance in the payroll bank account in the general ledger?

(b) A balance in the payroll account per the bank statement?

4 The system of internal check described in this chapter makes the concealment of a misappropriation of cash receipts unlikely except by collusion among three parties What are the duties of these three parties with respect to cash receipts and why would their collusion probably be required to conceal a misappropriation of receipts?

5 Compare the following cash procedures from the standpoint of a good system of internal check

(a) Some of the cash receipts are not deposited but are held in the office for making small disbursements

(b) All cash receipts are deposited daily and small expenditures are made from a petty cash fund which is replenished by check

6 What are some of the services rendered by a bank?

7 Why does the balance shown by the bank statement rarely agree with the balance shown by the depositor s books?

8 Assume that you are reconciling the bank account of a company at the close of the first month of its operations and that you check the bank statement and returned checks against the cash receipts and cash disbursements books in the manner described in this chapter How will each of the following items be disclosed?

(a) Checks outstanding at the end of the month

(b) Charges made by the bank not taken up on the books

(c) Checks charged by the bank at a figure higher than their face

(d) Checks raised (amount fraudulently increased) by the payee and cleared without detection by the bank

(e) Checks fraudulently or carelessly issued by the cashier without cash book entry In this connection can you see any reason why the person authorized to sign checks should not make the bank reconciliation?

Problems—Group A

Problem A-1 The bank balance as of June 30 1948 as shown by the books of Wilson Williams & Co agreed with that reported by The First National Bank

During the month of July the cash transactions of the company with the bank were recorded as shown on the following page

Cash Receipts Book

Date			Bank
1948			
July	3		110.40
	5		431.06
	5		126.32
	8		246.91
	15		178.40
	15		43.10
	15		192.70
	18		120.40
	25		31.76
	25		72.50
	31		140.50
			1,694.05

Cash Disbursements Book

Check No.	Date		Bank
	1948		
119	July	2	82.93
120		5	140.56
121		9	155.00
122		9	214.10
123		9	23.46
124		15	350.00
125		19	91.30
126		26	113.40
127		31	350.00
			1,520.75

The bank statement for the month of July showed the following:

Date		Checks		Deposits	Balance
		Balance brought forward			2,410.63
3		82.93			2,327.70
5				110.40	2,438.10
6		140.56		557.38	2,854.92
8	Ex.	.20		246.91	3,101.63
10		214.10			2,887.53
14		155.00			2,732.53
15		23.46	350.00	414.20	2,773.27
19	Col.	.50		120.40	2,893.17
25		91.30		104.26	2,906.13
		Balance end of month			2,906.13

Prepare a bank reconciliation as of July 31, 1948, and any journal entries necessary to correct the company's books.

Problem A-2. During the month of August, 1948, Wilson, Williams & Co. opened a bank account with City Bank & Trust Company. The company's cash books for the month of August are shown on pages 620 and 621. There were no other entries affecting cash during August.

The August statements of the two banks, together with lists of returned checks and debit memos, are as follows:

The First National Bank

Date		Checks		Deposits	Balance
		Balance brought forward			2,906.13
1		350.00		923.95	3,480.08
5		53.40	1,372.00	200.00	2,254.68
8		21.50		1,408.86	3,642.04
10	Ex.	.10		117.41	3,759.35
12		805.86		140.00	3,093.49
15		126.20	174.30	55.00	2,847.99
19	N.S.F.	117.41		742.02	3,472.60
27		331.65		99.50	3,240.45
31		92.50	126.20		3,021.75
		Balance end of month			3,021.75

Returned checks and debit memos (rearranged in numerical order)

Checks		Debit memos	
No 127	$ 350 00	Exchange charge	$ 10
128	1,372 00	N S F check	
129	53 40	(R. N Shackleford)	117 41
130	21 50		
131	805 86		
132	174 30		
133	126 20		
134	92 50		
135	331 65		
137	126 20		

City Bank & Trust Company

Date	Checks						Deposits	Balance
	Balance brought forward							—
1	Col.	50					1,000 00	999 50
5							120 00	1,119 50
12		10 00		633 60		627 20	500 00	348 70
14							1,018 21	1,366 91
15		1,000 00	Col	25	Ex.	10	610 00	976 56
21		456 00					1,287 00	1,807 56
	Balance end of period							1,807 56

Returned checks and debit memos (rearranged in numerical order)

Checks		Debit memos	
No 1	$ 633 60	Collection charge	$ 50
2	10 00	Collection charge	25
3	627 20	Exchange charge	10
4	1,000 00		
5	456 00		

Cash Disbursements Book

Date		Payee	Voucher No	Debit Vouchers Payable	Credits: Discount on Purchases	First National Bank: Check No	First National Bank: Amount	City Bank & Trust Company: Check No	City Bank & Trust Company: Amount
1948									
Aug	1	Namrock Brothers	112	1 400 00	28 00	128	1 372 00		
	5	Acme Sales & Service Co	110	53 40		129	53 40		
	7	Peoples Gas & Electric Co	113	21 50		130	21 50		
	8	W P Peat & Company	117	640 00	6 40			1	633 60
	10	International Iron Works	119	814 00	8 14	131	805 86		
	10	Empire Towel Service	116	10 00		2	10 00		
	10	Namrock Brothers	115	640 00	12 80			3	627 20
	14	Federal Savings and Loan Co	114	1 000 00				4	1 000 00
	15	J F Wilson	121	174 30		132	174 30		
	15	W T Williams	122	126 20		133	126 20		
	15	Alice McCarthy	123	92 50		134	92 50		
	19	Doubleton & Weeks	118	456 00				5	456 00
	24	International Iron Works	120	335 00	3 35	135	331 65		
	28	Namrock Brothers	127	547 50	10 95			6	536 55
	31	J F Wilson	124	174 30		136	174 30		
	31	W T Williams	125	126 20		137	126 20		
	31	Alice McCarthy	126	92 50		138	92 50		
				6 703 40	69 64		3 380 41		3 253 35

Cash Receipts Book

Date		Account Credited	Credits: Sundry Accounts L.F.	Credits: Sundry Accounts Amount	Credits: Accounts Receivable	Debits: Discount on Sales	Debits: First National Bank	Debits: City Bank & Trust Company
1918								
Aug.	1	Elliott Smith			460 00		460 00	
	1	Warren F. Wright			326 72	3 27	323 45	
	1	Notes Receivable		1,000 00				1,000 00
	5	Sales		320 00			200 00	120 00
	8	J. E. Winthrop			1,423 09	14 23	1,408 86	
	10	R. N. Shackleford			118 60	1 19	117 41	
	12	Sales		640 00			140 00	500 00
	14	Smith, Witherspoon Co.			1,028 50	10 29		1,018 21
	15	Notes Receivable		500 00			500 00	
	15	Sales		165 00			55 00	110 00
	19	J. F. Shouse			749 52	7 50	742 02	
	21	Calman Credit Co.			1,300 00	13 00		1,287 00
	26	Elliott Smith			75 00		75 00	
	26	T. J. Haldorson			24 50		24 50	
	31	Adams and White			416 50	4 17		412 33
	31	F. L. Bracken			257 50	2 58	254 92	
				2,625 00	6,179 93	56 23	4,301 16	4,447 54

From the information presented above and in Problem A-1, prepare reconciliations of the two bank accounts, and any journal entries necessary to correct the company's books.

Problems—Group B

Problem B-1. On March 31, 19—, the bank statement received by the Lucas Company showed a balance of \$6,775.65. The books of the company showed a cash balance of \$7,202.23.

Prepare a bank reconciliation, using the following information:

The following checks issued during March had not cleared the bank on March 31:

No. 1572	\$210.21
1585	7.29
1587	115.93
1593	72.09

The company's deposit of March 31, in the amount of \$648.13, was not credited to its account by the bank until April 1.

The bank, under date of March 31, charged the company's account with an item of \$184.00. Upon investigation it was found that this was charged to the company in error, since it was a check of Lucas and Son.

Problem B-2. Prepare a bank reconciliation for the X Company on December 31, 19—, using the following data:

Balance per books	\$ 5,660.11
Balance per bank statement	10,010.62

Items on company books but not on bank statement	
Deposit in transit—mailed December 31	685 00
Outstanding checks	
K60	3,221 09
K65	1,002 00
K66	918 70
K70	298 97
Items on bank statement but not on company books	
Debit memos for collection and exchange charges	1 25
A charge on December 31 for a \$300 00 note and \$3 00 interest This note was originally received from D O Anderson and was discounted by the *X* Company at the bank It matured on December 31 and was not paid by Anderson	303 00
An N S F check received from Hans Hills	2 00

A check in the amount of \$3 506 18 received from Peter Bryant, was recorded by the bookkeeper as \$3 605 18

Also submit the journal entries required to correct the books

Problem B-3 On August 4 19—, the Norris Co established a petty cash fund of \$100 00

During August the petty cashier made the following disbursements

Aug	5	(7012)	Stationery and Printing	\$14 73
	8	(6070)	Advertising	11 47
	13	(7071)	Postage	18 00
	15	(7090)	Miscellaneous General Expense	4 75
	19	(5172)	Freight In	2 59
	24	(6070)	Advertising	17 04
	28	(7090)	Miscellaneous General Expense	8 92
	30	(7090)	Miscellaneous General Expense	7 17

On August 31 the fund was replenished Give, in journal form the entry to record the establishment of the fund, assuming the voucher system is not used

Record the transactions in a Petty Cash Book with special columns for Miscellaneous General Expense, Advertising, and Stationery and Printing Use the numerical chart of accounts presented in Chapter 23

Give the entry, in journal form to record the replenishment of the fund

Practice Set (*Continued*)

August 3

(8) *A 20-day, 6% note is received from C E Bruse for the amount of today's sale* to him, \$5 340 00

(9) Give F J Donovan, Inc a 20-day, 6% note in the face amount of \$20,614 90, for materials purchased today

(10) Insurance policies expiring one year from August 1 are received today from Scott and Scott, together with their bill for \$4 920 00, terms, cash in 10 days Use the expense control columns in the voucher register to make the following apportionment of the premium cost

Account 5355	\$3,600 00
Account 6055	1 200 00
Account 7055	120 00

Do not forget that you are to make the postings to the selling expense analysis record.

(11) Discount our 20-day note for $10,000.00 at the First State Bank. Proceeds, $9,966.67.

August 4:

(12) Receive a 20-day, 6% note from Ellis Screen Company for $1,200.00, the amount of today's sale.

(13) Purchase materials from Graham Brothers, $34,872.00. Terms, 2/10, n/30.

(14) Issue a check for $300.00 to City Garage Company for garage rent for delivery trucks for August and September.

August 5:

(15) The Robert Lane note is discounted at the First State Bank. The proceeds are computed as follows:

Face of note	$14,693.81
Add interest at 6% for 20 days	48.98
Value at maturity	$14,742.79
Deduct discount on $14,742.79 for 17 days at 6%	41.77
Proceeds......	$14,701.02

(16) Purchase oil and other factory supplies from Benson Supplies Company, $2,413.90. Terms, 2/10, n/30.

(17) The discount period on the Morris and White, Inc. voucher expires today, and we want to take advantage of the 2% discount. However, we have reported some unsatisfactory materials and have not yet arrived at an agreement regarding the amount of credit we should receive. By agreement with Morris and White, Inc., we now make a partial settlement of $5,000.00, being allowed a discount of $100.00 and sending them a check for $4,900.00.

August 6:

(18) Discount the C. E. Bruce 20-day, 6% note at First State Bank. Discount rate, 6%; proceeds, $5,342.62.

(19) Receive a 20-day, 6% note from Manley and Rogers for today's sale, $18,630.00.

(20) Purchase materials from Morley Casting Co., $4,196.80; terms, 2/10, n/30.

(21) One of our trucks is to be used by Sandford, White & Co. (one of our customers) for a few days. Charge $50.00 to their account.

August 8:

(22) The First State Bank holds the $50,000.00 real estate mortgage assumed by the corporation when the partnership's assets were acquired. It is desired to retire this mortgage, and the bank consents to the following settlement:

Principal of mortgage..........		$50,000.00
Accrued interest:		
To July 31.......	$500.00	
August 1–8..................	66.67	566.67
Premium—1% of principal—(Charge Earned Surplus)..............		500.00
Amount of check issued today.......		$51,066.67

(23) Issue a check for $ 63 80 to Lippert Reduction Company for materials pur chased today terms cash

(24) Draw a $200 00 check to the order of the petty cashier to establish a petty cash fund

(25) T R. Price the sales manager is to be allowed in lieu of salary a commission of ½ of 1% of net sales his drawings are to be deducted from his commission and the balance is to be paid to him at the end of each month. Price is paid $500 00 today Charge account 1232—T R Price Drawings.

(26) Henry E Newman, Inc telephoned us today and said that they forgot to deduct the discount to which they were entitled their remittance is recorded in the cash receipts from customers book. A check for the amount of the discount was sent to them

August 9

(27) Kettleman and Company accept a 10-day draft for $3 125 00 the amount of the sale today The acceptance is discounted at 6% at the First State Bank. Proceeds $3 119 79

(28) Purchase materials from Weber and Fields $9 400 00 terms 10-day acceptance for amount of invoice less 2% discount We accept the draft

(29) Pay Bolton Wire Company the $3 976.30 voucher recorded August 1 less 2% cash discount

(30) Factory supplies purchased from Benson Supplies Company on August 5 at a cost of $316 80 are returned to them with their consent

August 10

(31) Kettleman and Company insist that if they pay the 10-day draft which they accepted yesterday they should be allowed a 2% discount. Make a voucher for the amount of the discount $62 50 this voucher will be paid if Kettleman and Company pay their acceptance

(32) The following purchases of materials are made

McKinnon Company—net 30 days	$2 115 00
Baxter & Beale—2/10 n/30 f o b Lakewood	5 624.75

(33) Issue a check payable to sales manager T R. Price for $296 80 for salesmen s traveling expenses.

ASSIGNMENT MATERIAL FOR CHAPTER 25

Questions

1. John Brown's accounts receivable ledger contains the following account:

Roy Kamm

July	1	2/10, n/30			560.50

In Brown's voucher register there is a voucher payable to Kamm for $890.00 subject to 1% discount if paid before July 10.

(a) What payment by Brown on July 9 will settle the balance due Kamm?
(b) Make the entry (journal form) to record this payment.
(c) How will this payment be recorded if Brown's books of original entry are similar to those used in the practice set?

2. Jones buys goods from Robbins on June 5 for $887.90; terms, 1/10, n/30, f.o.b. destination. Jones pays the freight, $45.07. On June 7, goods costing $175.45 are found to be defective and are returned; the freight on this return, also paid by Jones, is $20.40. What remittance by Jones will settle this account on June 14?

3. How should the following be shown in the balance sheet?

(a) Accounts receivable from stockholders.
(b) Accounts receivable from employees.
(c) Accounts receivable from customers.
(d) Accounts receivable from officers.

4. How would you interpret each of the entries in the following account?

Reserve for Bad Debts

1948					1947				
Aug.	1		J12	225.36	Dec.	31		JS	2,000.00
					1948				
					Dec.	31		J15	2,200.00
					1949				
					Feb.	24		J20	225.36

5. Suppose that the Reserve for Bad Debts has a debit balance of $309.75 before closing the books for the year on December 31. Aging the customers' accounts yields the following information:

Age	Amount	Expected Loss
1– 30 days	$6,065.87	
31– 60 days	1,513.25	$128.64
61– 90 days	659.08	25%
91–120 days	319.70	50%
5– 6 months	134.75	$119.80
7– 12 months	257.45	100%
Total	$9,010.10	

The probable losses shown were carefully computed What entry or entries affecting the Reserve and the Bad Debts accounts are necessary?

6 Describe three methods of estimating the amount to be credited to the reserve for bad debts

7 The following entry was made for an account considered uncollectible

Reserve for Bad Debts	200 00	
R F Burns		200 00

Assume that $100 00 is collected What entries should be made if

(a) It is thought the account may now be collected in full?

(b) No more collections are expected?

8 How should credit balances in the accounts receivable be presented in the balance sheet?

9 Discuss the reasons underlying the cost or market rule for the valuation of inventories

10 Can the gross profit method be applied to the valuation of raw materials and goods in process?

11 If the inventory of finished goods is valued at market purchase prices because they are lower than cost, does the profit and loss statement correctly state the gross profit on goods sold?

12 A company purchases merchandise for $15 000 00 and sells half of it for $10 000 00 The market value of the remaining half is $6 500 00 Prepare a partial profit and loss statement which will give a true statement of the facts

13 What is the advantage of the alternative method of recording purchase discounts described in Chapter 25? Are there any disadvantages?

14 At the end of a period the amount credited to Discounts Available on unpaid vouchers is $75 00 Of this amount $30 00 applies to unpaid vouchers on which the discount period has *expired* Give the adjusting journal entry *After* the books have been closed, what reversing entry is made?

15 Assume that you wish to record all expenses by one or the other of the following methods

(a) Charge all expense expenditures to expense accounts and set up prepared expense accounts at the end of the period if necessary

(b) Charge all expense expenditures to prepared expense accounts and write off the expired portion of each expense at the end of the period by a charge to an expense account

Which method would you adopt?

16 Assume that in keeping a set of books you decide to use both of the abovementioned methods of dealing with expenses using in each case the method appropriate to the conditions What will govern your choice of methods?

17 *For what four purposes may reserves be set up? Give examples*

Problems—Group A

Problem A-1 Pittsfield Company sells merchandise to Barnfold Company The books of Pittsfield Company showed a balance of $2 317 82 receivable from Barnfold Company on May 31, 19— on the same date the books of Barnfold Company showed a liability of $604 11 to Pittsfield Company

You are asked to determine why the accounts do not agree. You obtain a copy of the account receivable on Pittsfield Company's books, and a copy of the account payable on Barnfold Company's books. These accounts are in the laboratory material.

You are not asked to determine the correct balance; you are asked only to prepare a list of all differences in the accounts and to prepare a reconciliation statement showing that the differences in your list account for the difference in the balances of the accounts.

You will proceed as follows:

Check the debits for sales in Pittsfield's account with Barnfold against the credits for purchases in Barnfold's account with Pittsfield. Put check marks after the items which are in agreement.

Check the debits for payments, returns, etc. in Barnfold's account with Pittsfield against the credits in Pittsfield's account with Barnfold. Check the items which are in agreement.

Enter the unchecked items in the statement headed "Details of Differences in Accounts". Foot the four columns of this statement.

Enter the totals of the statement of details in the Reconciliation Statement, and foot the two columns of this statement. If the totals are in agreement, the accounts are reconciled.

Problem A-2. A company purchased a building on January 1, 1949. Its Rent Collected in Advance account contains the following credits for rent collections in 1949 on leases:

January 1	Three years	$9,000.00
February 1	Two years	6,000.00
March 1	Two years	4,500 00
April 1	One year	3,000.00
May 1	Two years	3,600.00
June 1	Three years	6,000.00
July 1	Six months	1,200 00
August 1	One year	3,000 00
September 1	Six months	1,800.00

Give the entries necessary to take up rent earned on December 31, 1949.

Problem A-3. The Liberty Finance Company borrowed substantial sums of money from banks, paying discount as follows:

Date of Loan	Period of Loan	Amount of Discount
January 1	60 days	$ 500.00
15	30 days	300.00
February 1	120 days	1,000.00
March 15	90 days	750 00

These payments were charged to Prepaid Bank Discount account.

Compute the amount of discount expired in each month and set up the Prepaid Bank Discount account and Discount Expense account as they would appear on March 31, after making transfers to the expense account. The books are not to be closed until the end of the year. The company, in its computations, uses the actual number of days in each month.

Problems—Group B

Problem B-1. The Miller Distributing Company made the following purchases during the year It had no inventory before the first purchase

January	15	250 units at \$1 75
March	27	300 units at 1 80
May	3	100 units at 1 87
August	12	400 units at 1 94
October	15	320 units at 1 97
December	8	275 units at 2 00

On December 31 the inventory contained 675 units Determine the cost valuation of the inventory by each of the following methods

(a) First-in, first-out
(b) Last in, first-out

Problem B-2. The Woodlawn Corporation had a fire in its warehouse on September 30, 1949, which destroyed its inventory of merchandise Estimate the inventory of goods on hand on September 30

The following balances appeared on the books on September 30

Sales		\$115,000 00
Returned Sales and Allowances	\$ 4 500 00	
Purchases	80 000 00	
Returned Purchases and Allowances		3 200 00
Inventory December 31, 1948	15 000 00	
Freight In	1,200 00	

In the past the Woodlawn Corporation made a gross profit of approximately 31% of net sales

Practice Set (*Continued*)

August 11

(34) Give a \$29,750 00 note to C D Fulton & Co for a purchase of machinery The note bears 6% interest and is due in 30 days

(35) Purchase materials from Hubbard and Laurel, \$6,354 70 Terms, 2/10, n/30

(36) Pay the Scott and Scott voucher of August 3

(37) Morris and White, Inc , finally agree to allow us a credit of \$500 00 because of our claim that materials purchased from them were unsatisfactory Today we settle the remainder of our indebtedness to them Although the discount period has expired, we are allowed the regular 2% discount because the delay in making complete settlement was caused by their delay in allowing us proper credit

August 12

(38) G E Boyce accepts a 10-day draft for \$11,711 00, the amount of today s sale less 2% The acceptance is discounted at the First State Bank. Proceeds, \$11,691 48

(39) A purchase was made from Weber and Fields on August 9, and a 10-day draft was accepted for the amount of the invoice, less 2% discount. Merchandise billed to us at $450.00 was returned; make the following journal entry to record the return:

1233—Weber and Fields	441.00	
8101—Discount on Purchases	9.00	
5179—Returned Purchases and Allowances		450.00

Make a notation in the Remarks column of the notes payable register; if Weber and Fields hold our acceptance to maturity, we can apply the $441.00 toward the payment of the acceptance. If Weber and Fields discount the acceptance, it will be presented to us by the endorsee, and we shall not be able to apply the offset; in that event we shall demand a cash payment from Weber and Fields.

(40) Pay the following:

Nelson and Mason—for advertising ..	$875.00
Daily News—want ads for factory labor (charge account 5390)	22 75

August 13:

(41) P. B. Munger accepts a 10-day draft for $30,000.00, the amount of the sale to him today.

(42) Settle the Graham Brothers voucher of August 4 in the manner detailed below.

Graham Brothers invoice		$34,872 00
Less 2% discount.. .		697.44
Net........... . . .		$34,174.56
Transfer the P. B. Munger acceptance	$30,000.00	
Less discount at 6% for 10 days	50.00	
Discounted value..		29,950 00
Remainder paid in cash.		$ 4,224.56

Record the entire transaction in the cash disbursements book.

(43) The entry in the cash receipts from customers book for the collection from Wilder & Simpson indicates that the amount of the remittance was computed as follows:

Invoice, August 5	$7,215.60
Less 2% discount	144.31
Remainder.... ..	$7,071.29
Less allowance, August 8	208.60
Remittance..........	$6,862.69

The customer has been notified of the error. Make the proper correcting entry.

August 15:

(44) Purchase materials from Cleveland Foundries. $17,000.00; they pay the freight ($195.00) although the terms were f.o.b. Cleveland. We give them a 30-day note without interest for the materials and freight. No discount allowed.

(45) Pay East and West Railroad freight bill which is detailed below

$306 87 On purchase from Baxter & Beale on August 10 Since the terms of the purchase were f o b Lakewood we will deduct this $306 87 when we pay the voucher Therefore charge account 2129—Freight to be Deducted The Baxter & Beale freight bill has been attached to the voucher payable to that company to serve as a reminder that the deduction is to be made when the check is drawn and so that it can be sent to the creditor as evidence that the freight was paid Write a memorandum Freight to be Deducted $306 87 in the Remarks column of the voucher register on the line for the Baxter & Beale voucher

48 65 On sale to D G Welch on August 12 Since the terms of this sale required that Welch bear the expense of the freight the $48 65 should be charged to him The charge should be entered in the Accounts Receivable column of the voucher register the customer s name should be written beside the amount so that the assistant bookkeeper will have the information he will require to post the entry

47 25 On returned sales
93 60 On sales
$496 37

(46) Pay the Benson Supplies Company voucher of August 5 less return and discount

August 16

(47) A credit memorandum of $813 19 is received from Baxter & Beale because of defective materials received August 10 (The credit memo is pinned to the voucher)

(48) Receive a bill from The Davison Job Printers terms 15 days detailed as follows

Factory forms (account 5311)	$ 297 80
Sales forms (account 6090)	216 30
Bookkeeping supplies and office forms (account 7012)	1 160 00
Total	$1 674 10

(49) Your assistant has prepared the payroll summary for the first half of August (The charge to account 1331—Machinery and Equipment represents labor in making machinery installations)

Your work in connection with the payroll consists of the following

(a) Post to the general ledger accounts and the selling expense analysis record (Your assistant will post to the manufacturing and general expense analysis records) The accounts to be debited and credited are indicated on the payroll summary

The net payroll liability to employees is shown by the summary to be $13 727 04

(b) Record a check payable to Payroll (This check is cashed for the purpose of making payroll payments)

If you have not read Appendix 1, do so at this time

August 17:

(50) Send Morley Casting Co. a check for $4,112.80, the net amount of the voucher payable to them.

(51) An account receivable from C. W. Finley, taken over from the partnership, in the amount of $219.80, is placed in the hands of an attorney for collection; and the $113.85 account receivable from C. L. Murphy, taken over from the partnership, is written off.

(52) A credit memorandum has been issued to J. C. Burns to record an error in footing the invoice of August 11, the total of which should have been $5,975.80. Since this credit memorandum was not issued for either a return or an allowance, but to correct an error in the billed selling price, the issuance of the credit memo should not involve a debit to Returned Sales and Allowances, but should involve a debit to Sales. Therefore, no amount was entered in the returned sales and allowances book, and a journal entry should be made.

(53) Purchase office supplies from Davis & Davis, $122.80, terms, net 15 days.

August 18:

(54) A check for $107.15 is received from Lippert Reduction Company for materials returned.

(55) A check is sent to Baxter & Beale in settlement of the voucher of August 10.

Invoice. .	$5,624.75
Less return, August 16	813.19
Invoice net of return	$4,811.56
Less 2% discount	96.23
Remainder	$4,715.33
Freight paid for them, August 15	306.87
Amount of check	$4,408.46

(56) Record in the cash disbursements book a return of materials to Hubbard and Laurel, $792.00, and the issuance of a check in payment of the remainder of the voucher of August 11.

(57) Yesterday a credit memorandum for $650.00 was issued to Warner Brothers. A further inspection of the merchandise indicates that they should have been credited with only $575.00.

August 19:

(58) Under the terms of the sale to O. O. Ferguson on August 3, interest at 6% accrued on the $3,212.90 account after August 13. Today we receive from Ferguson cash and a note, as follows:

Cash:	
To apply on account . . .	$1,500.00
Interest on $1,500.00 from August 13 to August 19 . .	1.50
Total—recorded in cash receipts from customers book	$1,501.50
A 30-day note, dated August 19, for:	
The balance of the account ($3,212.90 minus $1,500.00)	$1,712.90
Interest on $1,712.90 from August 13 to September 18 (credit account 2435—Interest Collected in Advance) .	10.28
Face of note.	$1,723.18

Record the receipt of the note and make such entry as may be required for the $1.50 interest.

(59) The Kettleman and Company acceptance discounted by us on August 9 was paid by the drawee today. Pay Kettleman and Company the voucher for the $62.50 discount which we agreed (see transaction 31) to pay them if their 10-day acceptance was paid at maturity.

(60) Weber and Fields present the 10-day acceptance dated August 9 and we issue a check for the net amount we owe them.

August 20

(61) The freight deduction taken by Warner Brothers in the settlement recorded today in the cash receipts from customers book includes $61.75 paid by them on merchandise returned on August 17. The entry in the cash receipts from customers book charges the total amount of the freight to account 6061—Freight Out. $61.75 should have been charged to account 6063—Freight on Returned Sales. Make a correcting journal entry.

(62) An entry in the cash receipts from customers book shows that J. C. Burns made a remittance in settlement of his invoice of August 11. The remittance was computed as follows:

Invoice	$6,075.80
Less 2% cash discount	121.52
Net	$5,954.28
Less freight	49.75
Cash remittance	$5,904.53

Burns apparently overlooked the credit memorandum which we issued to him on August 17 because of an overfooting of the invoice. He should have computed his remittance as follows:

Original invoice	$6,075.80
Less credit memorandum	100.00
Corrected billing	$5,975.80
Less 2% discount	119.52
Net	$5,856.28
Less freight	49.75
Cash remittance	$5,806.53

Make whatever journal entry is required to adjust the accounts. Burns is notified of the overpayment of his account.

(63) Effective today, part of one of the buildings has been rented to Millen Hardware Company for one year at $300.00 per month. The first month's rent is collected today. Credit account 2421—Rent Collected in Advance. Monthly transfers will be made to account 8121—Rent Income.

August 22

(64) John Lane makes a partial payment on his note and gives a new note for the balance. The details are presented below:

John Lane's present indebtedness:	
Note	$54,973.77
Accrued interest—20 days	183.25
Total	$55,157.02

Payment consists of.		
A 30-day, 6% note, signed by Fred Hamilton, dated July 31, taken at discounted value:		
Face........ .	$15,000.00	
Interest for 30 days	75.00	
Value of maturity	$15,075.00	
Discount on $15,075.00 to August 30—8 days....	20.10	
Discounted value, August 22		$15,054.90
A new 60-day, 6% note for		30,000.00
Cash for the remainder .		10,102.12
Total...........		$55,157.02

Make entries in the notes receivable register and the cash receipts book. Since Lane is not a customer, it is not necessary to make a journal entry charging the old note back to an account with him.

(65) Robert Lane today paid the bank his discounted note for $14,693.81, with interest thereon.

(66) Give our check to First State Bank to pay the discounted Boyce acceptance, due and dishonored today.

When Boyce accepted the draft due in 10 days, he was allowed a discount of $239.00, which he now forfeits by failure to pay the acceptance.

(67) Pay Stinson Motor Sales $3,800.00 for a new truck received today.

ASSIGNMENT MATERIAL FOR CHAPTER 26

Questions

1 Should the following assets owned by a manufacturing company be classified in its balance sheet as fixed assets?

(a) Land on which its factory is situated

(b) Land used as an experimental farm for the improvement of grain used as one of its raw materials

(c) Land and buildings formerly used as the company's factory, but now leased to another company

(d) Land which the company purchased two years ago and which it hopes to sell at a profit, the land is not in use

(e) Land which is not at present in use, but is being held for possible plant expansion

2 A fixed asset is manufactured by a company for its own use At what cost should it be placed in the asset account?

3 If a company constructs a fixed asset for its own use at a cost which is less than that at which it could have been purchased from outsiders at what value should it be shown on the books?

4 Should the following be charged to the asset account, to the related depreciation reserve, or to expense?

(a) Broker s commission in connection with purchase of real estate

(b) Taxes accrued at the date of purchase

(c) Taxes after purchase

(d) Cost of remodeling a section of the building to convert it into an office

(e) Annual painting and decorating costs

5 Machinery was purchased for $50,000 00 and sold at the end of 5 years for $15,000 00 A reserve for depreciation had been provided in the amount of $10,000 00 Give the journal entry to record the sale

6 Why is it unnecessary to amortize the cost of a trademark?

7 Is there any objection to charging all depreciable factory fixed assets to a Plant account and charging depreciation at 10% of the balance in this account, if 10 years is the average life of the fixed assets?

8 Why is depreciation not ordinarily credited directly to the fixed asset account?

9 How may the profit or loss on the disposal of a depreciated asset be determined? How should such profits and losses be treated in the books of account?

10 What is goodwill and how may its value be determined?

11 What are leaseholds and leasehold improvements? Explain the accounting procedure applicable to them

12 If a fixed asset is disposed of at a price in excess of its net book value, is it necessarily true that the depreciation provisions of prior periods were incorrectly computed?

Problems—Group A

Problem A-1. A corporation was organized on January 1, 1950. At the end of the year its ledger contained a Land and Buildings account, with debit and credit entries as shown below. The bookkeeper stated that the entries in this account had been made in accordance with the accounting principle that all costs during the construction period should be capitalized.

Debits:	
Incorporation fees and expenses.....	$ 500.00
Other organization expenses	300.00
Cost of land and old buildings (One building, the cost of which was estimated to be $25,000.00, was to be retained; the others were to be demolished)	100,000.00
Broker's commission on purchase	1,000.00
Attorney's fees for the year:	
Incorporating company	300.00
Examination of real estate title	100.00
Patent investigation	500.00
Real estate taxes accrued at date of acquisition	1,800.00
Paving assessments:	
1949..............	250.00
1950..............	250.00
Cost of rehabilitation of building retained	6,300.00
Contract cost of new building completed June 30, 1950	350,000.00
Real estate taxes for 1950	3,000.00
Cost of demolishing buildings	7,500.00
Interest on $350,000.00 for six months at 6% (The building was paid for with funds obtained from the sale of preferred stock)........	10,500.00
Semiannual dividend on preferred stock	12,500.00
Material, labor, and overhead costs of partitions, shelving, etc., installed by company employees	12,400.00
Excess of price quoted by a contractor in bid for partitions, shelving, etc., over the $12,400.00 stated above	2,600.00
Salary of John Smith for first six months of the year. Smith supervised the building construction; after June 30, he served as factory superintendent	1,500.00
Discount on $475,000.00 of preferred stock issued for cash to obtain funds for purchase of land and old buildings and construction of new building ..	9,500.00
Preferred stock given to a contractor for filling in swampland, grading, landscaping, and paving roads and laying sidewalks through the premises. The contractor's bid was $25,000.00, payable in either cash or preferred stock.	25,000.00
Replacement of windows broken in August	35.00
Repairs necessitated by a cyclone in September	5,000.00
Total debits..........	$550,835.00
Credits:	
Proceeds of sale of a portion of the land	$ 10,000.00
Proceeds of sale of salvage from building demolished	6,000.00
Credit to reduce balance to round amount of $500,000.00: the offsetting debit was made to Paid-in Surplus, an account which had been credited with part of the proceeds of the issuance of no-par common stock	34,835.00
Total credits....................	$ 50,835.00
Balance..............................	$500,000.00

Show what items can properly be included in the determination of the cost of the land and the cost of the buildings

Problem A-2 Following is the Machinery account of the Denver-Pascot Corporation, as of December 31, 1949, together with the Reserve for Depreciation—Machinery account

Machinery

1947									
Jan	1		J	8 000 00					
Apr	1		CD	15 200 00					
Oct	1		CD	8,332 00					
1948									
July	1		J	15,000 00					
1949									
Apr	1		CD	25 000 00					
Oct	1		CD	1,468 00					

Reserve for Depreciation—Machinery

					1947				
					Dec	31		J	3 941 50
					1948				
					Dec	31		J	5 816 50
					1949				
					Dec	31		J	9,125 00

On April 1 1949 the company acquired new machinery, having a list price of \$29 000 00, for \$25 000 00 in cash and the machinery acquired on January 1, 1947

Give journal entries to adjust the accounts, as of December 31, 1949, on the two following bases of accounting, both of which are regarded as acceptable

(a) Depreciation provisions are made annually, at 12½% of the closing balance in the asset account, no special provision for depreciation on assets sold is to be made for the period from the first of the year to the date of sale and the profit or loss on the disposal of an asset is to be based on the net book value at the preceding December 31st

(b) Depreciation is to be provided at the rate of 12½% per annum, depreciation on assets disposed of is to be computed for the fractional period from the first of the year to the date of sale, and depreciation on assets acquired is to be computed for the fractional period from the date of acquisition to the end of the year

Problems—Group B

Problem B-1 The *X* Company made the following expenditures

January 1, 1948		
Used delivery truck		\$3,500 00
January 15, 1948		
Garage bill as follows		
Overhauling motor	\$ 80 00	
New body	315 00	
New battery	15 00	
Gas and oil	10 50	420 50

June 30, 1948:	
Tires—to replace worn-out ones...	$5.00
October 15, 1950:	
Overhauling of motor, replacing pistons and bearings, new drive shaft . . .	350.00

Give the journal entries to record these transactions.

Problem B-2. The articles of partnership of the firm of *A*, *B*, and *C*, who share profits and losses equally, contained the following provision: "In the event of the death of a partner, the goodwill of the firm shall be computed by capitalizing at 12½% the excess of the average earnings for the three full years prior to his death in excess of 10% of the net worth of the firm as shown by the books at the end of the year prior to his death."

B died on May 3, 1950. The profits for the three preceding years were: 1947, $11,356.20; 1948, $12,287.95; 1949, $12,205.85. The balances in the Capital accounts on December 31, 1949 were: *A*, $30,000.00; *B*, $25,000.00; *C*, $20,000.00.

Make the proper entry for the goodwill.

Practice Set (*Continued*)

August 23:

(68) Give the First State Bank a check for $5,357.80, to pay the C. E. Bruce note discounted on August 6th, dishonored today.

(69) On August 13 we transferred a P. B. Munger acceptance to Graham Brothers, the acceptance was dishonored today. A check for $30,000.00 is sent to Graham Brothers.

(70) Pay F. J. Donovan, Inc., $20,683.62 for the 20-day, 6% note given on August 3.

(71) The discount taken August 17 on the Morley Casting Co. voucher was disallowed, because the discount period had expired. We issue a check today for the discount.

(72) Purchase typewriters for cash from Lowry Office Outfitters, $345.00.

(73) The note payable which we discounted at the First State Bank is due today. We renew it by giving the bank a 6% note due in six days for $10,000.00.

(74) Collect the remainder of Joseph Madison's subscription to preferred stock. Certificates for the stock are issued to him.

August 24:

(75) Ellis Screen Company pays note and interest due today, $1,204.00.

(76) In settlement of the dishonored acceptance charged to P. B. Munger yesterday, we receive cash and a 30-day, 6% note of W. E. Dennis, dated July 30. The settlement is detailed below:

Amount of dishonored Munger acceptance ..		$30,000.00
Dennis note:		
Face...	$20,000.00	
Add interest for 30 days at 6% ...	100.00	
Value at maturity ...	$20,100.00	
Less discount on $20,100.00 for 5 days at 6%	16.75	
Discounted value ...		20,083.25
Cash received (recorded in the cash receipts from customers book)		$ 9,916.75

When the note is collected at maturity, the $100 00 interest will be credited to Interest Income therefore, the $83 25 interest allowed to Munger should be debited to that account

(77) Machinery is purchased for $39 500 00 from Johnson Machine Company A cash payment of $19 500 00 is made today the balance is payable September 24

August 25

(78) The note received from John Lane on August 22 is discounted at the First State Bank The proceeds are computed as follows

Face	$30 000 00
Interest at 6% for 60 days	300 00
Value at maturity	$30 300 00
Discount on $30 300 00 to October 21—57 days	287 85
Proceeds	$30 012 15

(79) Your assistant has recorded the $197 82 received today from the attorney to whom the C W Finley account of $219 80 was sent for collection on August 17 The attorney has retained a 10% collection fee Make a journal entry to dispose of the balance in Finley s account by charge to account 7090

(80) Pay City Abstract Company $200 00 for title search relative to the real estate acquired from Lane Brothers

(81) Pay Stinson Motor Sales for the following

Trailer for truck	$475 00
Tires—to replace tires worn out	70 00
Total	$545 00

August 26

(82) Receive from Manley and Rogers a 30-day 6% note for $18 692 10 in renewal of their 20-day note dated August 6 plus interest to date

(83) Purchase materials from Watson Refineries $7 094 90 terms 2/10 n/30

(84) Pay Hanson Construction Company $415 00 for installing the machinery purchased on August 24

(85) One of the typewriters purchased a few days ago from Lowry Office Outfitters is returned to them today and a check for $115 00 is received

(86) At his request we deliver to J N Hancock by truck the goods sold him today, terms f o b Lakewood *Charge him $35 00 for cartage*

August 27

(87) The cash receipts from customers book contains an entry for $10 865 50 received from G E Boyce Boyce is in financial difficulties and no further collection is expected on his account of $11 950 00

(88) Pay McKinnon Company $2 115 00 in settlement of voucher recorded August 10

(89) One of the entries in the cash receipts from customers book records the collection of the $113 85 account of C L Murphy which was written off on August 17 Make a journal entry reversing the write-off

(90) Purchase materials from Wagner and Hobson $29 685 40, terms, 2/10, n/30

ASSIGNMENT MATERIAL FOR CHAPTER 27

Questions

1. What are the advantages of keeping accounts on a departmental basis?

2. If the method described in this chapter for recording cash sales in a business with various departments is used, why are the totals of the Sales column in the cash receipts book and the Cash column in the sales book not posted?

3. What departmental accounts should be kept if it is desired to determine merely the gross profit on sales by departments?

4. What additional information must be obtained to determine the net profit on sales by departments?

5. What is the danger in apportioning selling expenses to departments on the basis of sales?

6. What are the advantages of closing accounts to departmental Selling accounts *instead of directly to Profit and Loss?*

7. If the operations of a department result, year after year, in a net loss, after charging it with reasonable amounts of selling and general expenses, could there be any possible reason for continuing its operations?

Problems—Group A

Problem A-1. The laboratory material contains working papers of Scheer and Warner for the month of June, 19—, after all adjustments have been made.

The following additional information is furnished:

	Department *A*	Department *B*
Inventories, June 30	$4,250.00	$1,625.00
Selling expense apportionments:		
Advertising	30.50	30.50
Delivery Expense	29.00	19.00
Rent ($20.00 to be classified as a general expense)	75.00	75.00
Depreciation:		
Store Equipment	10.00	5.00
Delivery Equipment	20.00	11.25

Complete the working papers and prepare a departmental statement of profit and loss, carrying the departmentalization to the point of net profit on sales.

Problem A-2. Refer to Problem A-1 and prepare a statement of profit and loss carrying the departmentalization to the Net Income line. Apportionments made by the management were:

	Department *A*	Department *B*
As in Problem A-1:		
Advertising	$ 30.50	$ 30.50
Delivery Expense	29.00	19.00
Depreciation—Store Equipment	10.00	5.00
Depreciation—Delivery Equipment	20.00	11.25

	Department *A*	Department *B*
Additional		
Rent	85 00	85 00
Office Salaries	100 00	100 00
Depreciation—Office Equipment	5 00	5 00
Bad Debts	44 95	49 40
Collection and Exchange	95	1 00
Miscellaneous General Expense	14 50	14 50
Discount on Purchases	13 00	17 45
Interest Income	8 30	8 33
Discount on Sales	33 51	36 47
Interest Expense	20 27	12 23

Problem A-3. You are to prepare a statement of profit and loss, based on the data in Problems A-1 and A-2, showing the contributions of Departments *A* and *B* to non departmental overhead After examining the profit and loss statement which you prepared for Problem A-2, the management made the following estimates as to expenses and miscellaneous income which would be eliminated by the discontinuance of Department *A* or Department *B*

Analysis to Determine Probable Reduction
In Expenses and Miscellaneous Income
Which Would Result from Discontinuance of
Department *A* or *B*

			Effect of Discontinuance of Department *A*			Effect of Discontinuance of Department *B*	
		Charged to Dept *A*	Eliminated	Not Eliminated	Charged to Dept *B*	Eliminated	Not Eliminated
Selling Expenses							
Advertising		$ 30 50	$30 50		$ 30 50	$30 50	
Sales Salaries	(a)	300 00		$300 00	200 00		$200 00
Freight Out		43 00	43 00		54 00	54 00	
Delivery Expense	(b)	29 00		29 00	19 00		19 00
Rent	(c)	75 00		75 00	75 00		75 00
Depreciation — Store Equipment	(d)	10 00		10 00	5 00		5 00
Depreciation — Delivery Equipment	(h)	20 00		20 00	11 25		11 25
Total Selling Expenses		$507 50	$73 50	$434 00	$394 75	$84 50	$310 25
General Expenses							
Rent	(c)	$ 10 00		$ 10 00	$ 10 00		$ 10 00
Office Salaries	(e)	100 00		100 00	100 00		100 00
Depreciation—Office Equipment	(f)	5 00		5 00	5 00		5 00
Bad Debts	(g)	44 95	$44 95		49 40	$49 40	
Collection and Exchange		95	95		1 00	1 00	
Miscellaneous General Expense	(h)	14 50		14 50	14 50		14 50
Total General Expenses		$175 40	$45 90	$129 50	$179 90	$50 40	$129 50

	Charged to Dept A	Effect of Discontinuance of Department A: Eliminated	Effect of Discontinuance of Department A: Not Eliminated	Charged to Dept B	Effect of Discontinuance of Department B: Eliminated	Effect of Discontinuance of Department B: Not Eliminated
Other Income:						
Discount on Purchases . .	$ 13.00	$13.00		$ 17.45	$17.45	
Interest Income .	8.30	8.30		8.33	8.33	
Total Other Income	$ 21.30	$21.30		$ 25.78	$25.78	
Other Expenses:						
Discount on Sales	$ 33.51	$33.51		$ 36.47	$36.47	
Interest Expense . . .	20.27	20.27		12.23	12.23	
Total Other Expense	$ 53.78	$53.78		$ 48.70	$48.70	

Explanatory Notes

(a) The company employs two sales clerks; it would be necessary to retain both even if one of the departments was discontinued.

(b) The delivery equipment would have to be kept in service for either department.

(c) It would be necessary to continue renting the entire store, even though only one department was operated.

(d) The discontinuance of either department would not enable the company to reduce the amount of store equipment.

(e) There is only one office employee.

(f) The discontinuance of either department would not enable the company to reduce the amount of office equipment.

(g) The provision for bad debts was based on the net sales. The discontinuance of a department would eliminate the sales and the bad debt provision.

(h) The miscellaneous general expense consists of office supplies, telephone, etc., which would not be appreciably reduced by the discontinuance of a department.

Prepare the required statement.

Problems—Group B

Problem B-1. Refer to Problem A-1 and prepare journal entries to close the books.

Practice Set (*Continued*)

August 29:

(91) The directors have authorized an issue of $300,000.00 of first mortgage bonds, to be dated August 1, to mature in ten years, and to bear interest at 6%, payable semiannually. The indenture requires the creation of a sinking fund, by monthly contributions, sufficient to retire all issued bonds at maturity.

At the present time, \$200,000 00 of the bonds are to be issued, for the purposes mentioned below the monthly sinking fund contribution is, therefore, fixed at \$1,666 67 The indenture also requires the transfer to a sinking fund reserve of an amount equal to the monthly sinking fund deposit

The bonds are secured by a mortgage on all the company's real estate and machinery

Details regarding the bonds issued today are shown below

(a) To the Citizens State Bank, to pay note		
Face of bonds		\$25 500 00
Interest accrued since August 1		119 00
Total		*\$25 619 00*
Note Payable—dated July 7	\$25 000 00	
Accrued interest	*220 83*	*25 220 83*
Discount		\$ 398 17
(b) To First State Bank, to pay note		
Face of bonds		\$50 600 00
Interest accrued since August 1		236 13
Total		\$50 836 13
Note payable—dated July 15	\$50,000 00	
Accrued interest	375 00	50 375 00
Discount		\$ 461 13
(c) To retire 5% mortgage on machinery and equipment		
Face of bonds		\$60,300 00
Interest accrued since August 1		281 40
Total		*\$60 581 40*
Mortgage payable	\$60 000 00	
Accrued interest	991 67	60 991 67
Premium (allowed because the bonds bear 6% interest whereas the mortgage bore 5%)		\$ 410 27
(d) To Lakewood Investment Association for cash		
Face of bonds		\$63 600 00
Proceeds—at 95		*60 420 00*
Discount		\$ 3 180.00
Accrued interest—in cash		\$ 296 80

The new accounts required in connection with this bond issue are
2350—6% First Mortgage Bonds
2359—Unissued Bonds
1450—Bond Discount
8250—Bond Interest (Credit with accrued interest on bonds issued)
2150—Accrued Bond Interest
1250—Sinking Fund Cash
1251—Sinking Fund Securities
3250—Sinking Fund Reserve

Discounts and premium on bonds issued should be recorded in account 1450

(92) On August 23 we charged C E Bruce for a 20-day, 6% dishonored note (See transaction 68) Your assistant has recorded today in the cash receipts from customers book a check received from Bruce in the amount of \$5,363 16, but when he posted the credit to Bruce's account he observed that the account had a credit balance of \$5 36 Make a journal entry to dispose properly of this credit balance

(93) Collect $20,100.00 from W. E. Dennis in settlement of note and interest.

(94) Pay First State Bank $10,010.00 for the note given the bank on August 23, and interest.

August 30:

(95) Receive $15,075.00 in settlement of the Fred Hamilton note and interest.

(96) Pay East and West Railroad freight bill, which is detailed below:

$317.80	On machinery purchased from C. D. Fulton & Co.
32.80	On goods returned on August 24 by Steel Valve Company. (Charge the customer because the return was caused by a mistake in ordering.)
489.63	On materials purchased.
68.57	On sales.
23.45	On returned sales.
$932.25	Total.
15.40	Railroad's overcharge on bill paid August 15, for freight charged to D. G. Welch on goods sold to him.
$916.85	Net amount paid.

(97) *The cash receipts from customers book contains an entry for a remittance* from Rowley and Company in payment of an account taken over from Lane Brothers. Charge them with the discount improperly taken.

(98) One of the trucks acquired from Lane Brothers is sold for cash today. It was carried in the accounts at $1,500.00, and was sold for $1,150.00.

Before recording the sale, make an entry to charge August operations with depreciation on the old truck at the rate of 1½% per month.

August 31:

(99) Issue a check for $193.07 to the petty cashier to increase the fund to $500.00 after replenishing it for the following expenditures:

Account		Amount
1341	Factory tools	$ 50.55
6051	Gas and oil for trucks	41.17
6070	Sales circulars	22.60
7011	Typewriter supplies	28.75
7071	Postage	50.00
		$193.07

(100) Pay The Davison Job Printers voucher recorded August 16.

(101) The August bill received from Central Power Co., payable September 10, is detailed as follows:

Factory light and power	$347.90
Office light	31.65
	$379.55

(102) City Garage Company bills us for the following items, payable September 10.

Gas and oil	$ 99.47
Repairs	103.24
	$202.71

(103) Compute the amount of T R Price's commission at ½ of 1% of net sales (see transaction 25) The net sales for the month were $227,073 55 The income tax withholding is $231 17 Compute the O A B withholding and tax at 1% each, the state unemployment tax at 2 7%, and the federal unemployment tax at 3% Record in the journal
Give Price a check for the balance of his account

(104) Draw a check payable to Cash for salesmen's traveling expenses, $617 23

(105) A check for $1,666 67, the regular monthly sinking fund deposit, is given to Midland Trust Company the sinking fund trustee
The sinking fund reserve entry should also be made at this time

(106) Midland Trust Company informs us that it has purchased securities for the sinking fund at a cost of $1 500 00

(107) *The directors declared the following dividends, payable September 10 to* holders of record August 31

Preferred stock—$^1/_{12}$ of 8%
Common stock—1%

(108) The bank statement shows a $13 12 charge for collection and exchange
O E Shanklin's check, in the amount of $1 866 30, which was deposited on August 31, is returned by the bank, N S F
These charges should be recorded in the cash disbursements book without making vouchers or checks, because they are represented by a debit memo and the N S F check

(109) Foot and complete the postings of all the books of original entry

(110) Take a trial balance of the general ledger Enter the account balances in the Trial Balance columns of the working papers provided in the laboratory material

ASSIGNMENT MATERIAL FOR CHAPTER 28

Questions

1. What is meant by an extraneous profit?

2. A corporation increased its capital stock and sold $40,000.00 par value of stock for $44,000.00. The premium was credited to Profit and Loss and was shown in the company's statements as part of the profits. Do you approve of this treatment? If not, what do you think should have been done?

3. A corporation purchased a building at a cost of $75,000.00, and paid for it by the issuance of no-par stock; $50,000.00 was credited to a capital stock account, and $25,000.00 was credited to Paid-in Surplus. At the end of the first year of operations, the company found that it had made a profit of $4,000.00 before making any provision for depreciation; the life of the building was estimated at 25 years, and the depreciation was estimated at $3,000.00 per year. Since the company desired to pay a dividend of $4,000.00, the bookkeeper was instructed to make the following entry:

Paid-in Surplus	3,000.00	
Reserve for Depreciation—Building		3,000.00
To provide for depreciation for the year.		

The president of the company defended this entry on the ground that the Paid-in Surplus arose in connection with the acquisition of the building, and that it was, therefore, proper to charge depreciation against this surplus. What is your opinion?

4. A corporation's Surplus account has a credit balance of $12,000.00, of which $10,000.00 was produced by writing up its land to an appraised value. The directors want to pay a dividend of $5,000.00. What advice would you give them?

5. What is meant by *manufacturing profit?* Discuss the advisability of showing it on the books.

6. A company has received orders for future delivery amounting to $5,000.00; it has goods on hand, which cost $3,500.00, which are sufficient to fill these orders. The management of the company wishes to include $1,500.00 as profits in its operating statement. Would you approve this procedure?

7. A printer received an order for 10,000 textbooks, which he completed and had ready for delivery before the end of the year. As an accommodation to the publisher, the printer agreed to hold these books in his warehouse and make shipments to schools as directed to do so by the publisher. The printer desired to include the profit on this work in his operating statement for the year. Would you approve?

8. A company which owned its factory kept an account called Building Expense and Income. This account was charged with all the costs of operating the building, including depreciation; an entry was made monthly debiting Building Rent account and crediting Building Expense and Income account with a theoretical amount of rent which it was believed would have had to be paid if the building had not been owned. The resulting balance in the Building Expense and Income account was shown in the profit and loss statement under the caption of Other Income. Is this procedure in accordance with accounting principles?

9. A company which sells goods at wholesale manufactures most of its merchandise. It proposes to bill its wholesale department for all goods manufactured at cost plus 10%; the 10% addition is taken into income. Do you consider this procedure acceptable?

10. A company has its fixed assets appraised at each year-end and adjusts its accounts to show the values disclosed by the appraisal; the adjustments of the asset valuations are shown in the operating statement as income or expense. What comment do you have to make on this procedure?

11. A manufacturing company has expended a total of $3,000.00 worth of its own material, labor, and expense in constructing a machine for its own use. This machine, if bought in the open market, would have cost $4,000.00. Is it sound accounting to capitalize this machine at the market price?

12. What will be the effect on the profit and loss statements of the present and future periods if:

Deferred charges are ignored?
Deferred credits are ignored?
Accrued expenses are ignored?
Accrued income is ignored?

13. Is it regarded as good accounting to take up profits on uncompleted work under the following conditions:

(a) The product is being made for stock?
(b) The work is being done under a contract at a fixed price?
(c) The work is being done on a cost plus basis?

14. A company purchases for $75,000.00 a plant which has been in use for fifteen years. It is in a run-down condition, and the company spends $15,000.00 to put it into condition for use. The expenditures were principally for repairs, painting, and similar work that would have been considered operating charges had the plant been maintained properly by the previous owner. Should the $15,000.00 be recorded as a capital or a revenue expenditure?

15. Should cash discounts on purchases of fixed assets be recorded as income or as deductions to determine cost?

16. In order to finance the construction of its plant, a company issues par value stock at a 20% discount. Is the stock discount properly chargeable to the cost of the plant?

17. When fixed assets are constructed by a concern for its own use, it is agreed that the material and direct labor costs should be included in the cost of the fixed assets. However, opinions differ regarding the propriety of including overhead expense. Discuss this matter, stating the different opinions held. What do you think is the proper procedure?

18. A company which had made no provision for depreciation of its building argued that no provision was necessary because the land value had increased sufficiently to offset the depreciation of the building. Do you consider this a good argument?

19. Is it good accounting to base the amount of the annual depreciation on the amount of the profits, and to make large provisions in good years and small provisions in poor years?

20. At certain times of the year a company has large amounts of cash which it invests in bonds; these are sold when the cash is needed. How should these bonds be valued in the balance sheet if their market value at the balance sheet date is considerably above cost? How should they be valued if their market value is considerably below cost?

21. A company issued $1,000,000.00 of 4% bonds at 95, and immediately wrote off the discount to Earned Surplus. Do you consider this procedure correct?

22. A charge of $10,000.00 for possible losses due to tornadoes was included in the expenses before arriving at net income; the offsetting credit was recorded in a reserve. What is your opinion regarding the propriety of this charge to income?

23. If a sinking fund reserve is created, should income on the sinking fund securities be credited to the reserve or should it be passed through the Profit and Loss account? Give reasons for your answer.

24. A corporation has been engaged in business for three years, with an investment in machinery totaling $75,000.00 during that time. No depreciation has ever been provided. At the end of the third year, the directors decide that an annual charge of 5% of the cost of the machinery should have been made for depreciation, and they now propose to set up such a reserve. How should the entry be made?

25. Discuss the theory which justifies carrying consignment expenses applicable to unsold goods as part of the inventory valuation instead of closing them out as charges against profits.

26. Give an illustration of an error in computing the profits of one year which will be offset by a counterbalancing error in a subsequent year which will correct the surplus at the end of the second year but leave the profits of each year incorrectly stated.

27. Give an illustration of an error in computing the profits of one year which will not be counterbalanced by an error in the next year.

28. Sales aggregating $25,000.00 were entered on the books as of December 31, 1948, but the goods were not delivered until January 25, 1949. What adjustments would you make in preparing the profit and loss statement and balance sheet?

Practice Set (*Continued*)

August 31:

(111) Prepare a reconciliation of the account with First State Bank. The bank statement shows a balance of $145,043.98. The following checks are outstanding:

Number	Payee	Amount
34	Hanson Construction Company	$ 415.00
37	East and West Railroad	916.85
39	The Davison Job Printers	1,674.10

(112) Make adjusting entries for the following items. Post the adjusting entries from the journal and the payroll summary to the ledger and the selling expense analysis record; also enter them in the working papers.

(a) Provision for bad debts—1% of net sales.

(b) Accrued interest on notes receivable, $15.58.

(c) Interest included in face of notes receivable—portion earned, \$5 14
(d) Accrued interest on notes payable, \$99 17
(e) Depreciation, based on month-end balances in the accounts, and computed at $^1/_{12}$ the following annual rates

Buildings	3%
Machinery and equipment	12
Tools	24
Delivery equipment	18
Furniture and fixtures	12

(f) The patents had a life of 15 years from August 1.
(g) Unexpired insurance

Charged to 5355	\$3 300 00
Charged to 6055	1,100 00
Charged to 7055	110 00
	\$4,510 00

(h) The accrued payroll is shown in the payroll summary.
(i) Accrued property taxes Factory, \$825 00, General, \$140 00
(j) Prepaid garage rent, \$150 00
(k) Coal inventory \$375 00
(l) Factory supplies inventory, \$300 00
(m) Stationery and printing inventory, \$165 00
(n) Of the rent collected in advance, \$100 00 has been earned.
(o) Accrued bond interest, \$1 000 00
(p) The net bond discount was \$3,629 03 Although the bonds were issued for 10 years, or 120 months, all but two days of August had expired before the bonds were issued, the effective life of the bonds is, therefore, only $119^2/_{30}$ months, or 119 07 months The amortization for August is therefore, $^{07}/_{119\,07}$ of \$3,629 03, or \$2 13

(113) Your assistant has prepared the following schedule of accounts receivable

Accounts Receivable, August 31, 19—

	Debit Balances	Credit Balances
J C Burns		98 00
Ellis Screw Company	8,962 75	
J N Hancock	5,581 12	
J L Horton	2,793 20	
Paul Jones	*2,165 00*	
Kettleman and Company	14,176 20	
The Meyers Mfg Co	3,619 70	
Rowley and Company	4,252 12	
Sandford, White & Co	14,221 07	
O E Shanklin	1,866 30	
Steel Valve Company	4,064 50	
D G Welch	1,758 85	
Total debit balances	63,460 81	
Total credit balances	98 00	98 00
Net debit balances	63,362 81	

Determine that this schedule is in agreement with the controlling account

(114) The laboratory material contains the following schedules which your assistant has prepared from the subsidiary expense analysis records:

Schedule of manufacturing expenses.
Schedule of general expenses.

See that they are in agreement with the respective controlling accounts.

(115) Prepare the following schedules and determine their agreement with the related controlling accounts:

Vouchers payable.
Notes payable.
Notes receivable and notes receivable discounted.
Selling expenses.

(116) Complete the working papers. The inventories on August 31 were:

Finished goods. . .	\$60,986.50
Goods in process	30,986.49
Raw materials	53,218.70

The working papers should show a net profit of \$27,157.42 before income taxes. Assume that the income tax provision should be \$10,400.00: enter this provision in the working papers as follows:

	Profit and Loss Debit	Balance Sheet Credit
Provision for federal income tax.....	10,400.00	10,400.00

ASSIGNMENT MATERIAL FOR CHAPTER 29

Questions

1 What are the advantages of keeping perpetual inventories?

2. If manufacturing accounts are kept in the manner described in this chapter how can the inventory of goods in process be determined at any time?

3 State what entries under the accounting procedure described in this chapter, affecting general ledger accounts should be made, when

(a) Raw materials are purchased for cash
(b) Raw materials are used on a production order
(c) Direct labor is charged to a production order
(d) Overhead is charged to a production order
(e) A production order is completed
(f) A sale is made

4 At the end of a period how is the difference between the balance of the Manufacturing Expense controlling account and the balance of the Manufacturing Expense Applied account adjusted?

5 Describe the functions of

(a) Raw material perpetual inventory cards
(b) Material requisitions
(c) Production orders
(d) Finished goods perpetual inventory cards

Problems—Group A

Problem A 1 Prepare perpetual inventory sheets for Commodity *M* based on the following facts Construct one perpetual inventory on the first in first-out basis Construct another perpetual inventory on the last-in first-out basis

	In		
	Number	Unit Cost	Out
May 1	300	\$5 00	
6	200	5 20	
13			150
17	100	5 25	
21			200
24	150	5 30	
29			80
31			100

Problem A 2 The trial balance of Phelps Incorporated on December 31 1949 appears in the laboratory material The following adjustments are required

(a) Depreciation of machinery and equipment is to be provided at the rate of 5% applied to the balance in the asset account
(b) The reserve for bad debts is to be increased by a provisi n equal to ½ of 1% of the net sales

(c) The unabsorbed factory expense is to be apportioned to cost of sales, finished goods, and goods in process in the ratio of the balances in these accounts.

Prepare journal entries for the foregoing adjustments, and apply them to the working papers.

Complete the working papers.

Prepare a profit and loss statement, a statement of surplus, and a balance sheet.

Prepare journal entries to close the books.

Problems—Group B

Problem B-1. State in journal form the debits and credits made in the general ledger for the following transactions; assume that a voucher system is used.

(a) Purchase of raw materials on account, $5,000.00.
(b) Materials requisitioned for use in production, $1,500.00.
(c) Direct labor paid in cash, $2,000.00.
(d) Direct labor applied to goods in process, $2,000.00.
(e) Manufacturing expenses applied to goods in process, 80% of direct labor.
(f) Cost of finished goods completed, $3,900.00.
(g) Cost of finished goods sold, $2,200.00.

Problem B-2. A general ledger contains the following account balances:

Sales		$100,000.00
Materials	$16,000.00	
Goods in Process	5,400.00	
Finished Goods	30,000.00	
Indirect Labor	7,800.00	
Factory Rent	8,000.00	
Factory Heat, Light, and Power	2,500.00	
Insurance and Taxes—Factory	1,200.00	
Miscellaneous Factory Expense	1,500.00	
Manufacturing Expense Applied		20,500.00
Cost of Sales	75,000.00	

(a) Make a journal entry adjusting the Cost of Sales account for the difference between the actual manufacturing expenses and the total thereof applied to goods in process.
(b) Make a journal entry closing the manufacturing expense accounts.

Practice Set (*Concluded*)

(117) Prepare the following statements:
Statement of Cost of Goods Manufactured
Profit and Loss Statement
Statement of Earned Surplus
Balance Sheet

(118) Close the books. (Do not forget to make an entry debiting account 8266 and crediting account 2166 for the estimated provision for income tax.)

(119) Make and post entries reversing adjustments b, d, g, i, j, k, l, m, and o.

(120) Take an after-closing trial balance.

ASSIGNMENT MATERIAL FOR CHAPTER 30

Questions

1 What is meant by horizontal analysis? Vertical analysis?

2 What information can be obtained by a comparison of analytical per cents?

3 Why may comparisons of analytical per cents be misleading?

4. Assume that two companies have the same amount of working capital and the same working capital ratio Why may one company be in a better working capital position than the other?

5 Would you consider each of the following as reflecting an improvement or not?

(a) Increase in the ratio of net sales to receivables
(b) Increase in the finished goods turnover
(c) Increase in the ratio of net worth to debt
(d) Increase in the ratio of net worth to net fixed assets
(e) Increase in the ratio of net sales to net fixed assets

Problems—Group A

Problem A-1 The laboratory material contains a comparative statement of profit and loss and a comparative balance sheet of The *A B* Company Complete the statements, which are illustrative of horizontal analysis

Problem A-2 The laboratory material contains statements in which you are to enter per cents illustrating vertical analysis

Problem A-3 Following are statements of the Gorden Company as drawn up on December 31, 1948

GORDEN COMPANY — Exhibit C

Statement of Cost of Goods Manufactured and Sold
For the Year Ended December 31, 1948

Raw Materials		
Inventory, December 31, 1947	$ 39 000 00	
Purchases	97 000 00	
Total	$136 000 00	
Less Inventory, December 31, 1948	36 000 00	
Raw Materials Used		$100 000 00
Direct Labor		110 000 00
Manufacturing Expenses		80 000 00
Goods in Process December 31, 1947		10 000 00
Total Manufacturing Costs		$300 000 00
Goods in Process December 31, 1948		12 000 00
Cost of Goods Manufactured		$288 000 00
Finished Goods, December 31, 1947		60 000 00
Total		$348 000 00
Finished Goods, December 31, 1948		72 000 00
Cost of Goods Sold		$276 000 00

GORDEN COMPANY Exhibit B

Profit and Loss Statement

For the Year Ended December 31, 1948

Sales	$412,000.00
Returned Sales and Allowances	12,000.00
Net Sales	$400,000.00
Cost of Goods Sold (Exhibit C)	276,000.00
Gross Profit on Sales	$124,000.00
Selling Expenses	53,000.00
Net Profit on Sales	$ 71,000.00
General Expenses	47,000.00
Net Income	$ 24,000.00

GORDEN COMPANY Exhibit A

Balance Sheet

December 31, 1948

Assets

Current Assets:			
Cash		$ 30,000.00	
Accounts Receivable		200,000.00	
Inventories:			
Finished Goods	$ 72,000.00		
Goods in Process	12,000.00		
Raw Materials	36,000.00	120,000.00	
Total Current Assets			$350,000.00
Sinking Fund Securities			10,000.00
Fixed Assets:			
Land		$ 20,000.00	
Buildings	$110,000.00		
Less Reserve for Depreciation	30,000.00	80,000.00	
Total Fixed Assets—Net			100,000.00
Prepaid Expenses			40,000.00
			$500,000.00

Liabilities and Net Worth

Current Liabilities		$140,000.00
Fixed Liabilities:		
Mortgage Payable (Secured by Land and Buildings)	$ 50,000.00	
Notes Payable	10,000.00	60,000.00
Total Liabilities		$200,000.00
Net Worth:		
Capital Stock—Par Value, $100.00	$250,000.00	
Earned Surplus	50,000.00	
Total Net Worth		300,000.00
		$500,000.00

Compute the following

Working capital ratio
Acid test ratio
Raw material turnovers
Finished goods turnovers
Ratio of net sales to receivables
Ratio of net worth to debt
Ratio of net worth to net fixed assets
Ratio of net sales to net fixed assets
Book value per share of stock
Ratio of net income to net worth
Net income per share of stock
Per cent of net income to net sales
Per cent of gross profit to net sales

Complete the following questionnaire grouping of ratios by entering the ratios for 1948

	1947	1948
Is the working capital position improving?		
Working capital ratio	2 75	______
Acid test ratio	1 63	______
Raw material turnovers	3 00	______
Finished goods turnovers	5 32	______
Ratio of net sales to receivables	2 04	______
Is the stockholders equity increasing?		
Ratio of net worth to debt	1 38	______
Book value per share of stock	$116 00	______
Is there any tendency toward overinvestment in fixed assets?		
Ratio of net worth to net fixed assets	2 64	______
Is the net income increasing?		
Ratio of net income to net worth	12 41%	______
Net income per share of common stock	$ 14 40	______
Per cent of net income to net sales	7 35%	______
Per cent of gross profit to net sales	35 92%	______

Problems—Group B

Problem B-1. John Simpson died in December 1943 He was one of the principal stockholders and an officer of The Ajax Company and his widow still holds the stock. She called on you today and stated that for many years the company was engaged in the manufacture and sale of Product X of which it enjoyed a monopoly by reason of the ownership of patents Before her husband s death the business was very profitable and paid large dividends During 1944 1945 and 1946 the dividends decreased each year and stopped in 1947

Mrs Simpson stated that she was not familiar with the recent developments in the business except to the extent that they were disclosed by the annual statements which she has left with you You will assume that you have asked a clerk in your office to summarize these statements in comparative form the statements prepared by him are presented on pages 655 and 656 All amounts are shown in thousands of dollars.

What do you think has happened to the business?

THE AJAX COMPANY
Comparative Profit and Loss Statement
For the Years Ended December 31, 1944, 1945, 1946, 1947, and 1948

Exhibit B

	1944	1945	1946			1947			1948			
	Product X	Product X	Product X	Product Y	Total	Product X	Product Y	Total	Product X	Product Y	Product Z	Total
Sales—Net	$542	$565	$555	$115	$670	$380	$175	$555	$115	$122	$465	$702
Deduct Cost of Sales	320	333	325	77	402	255	133	388	68	87	220	375
Gross Profit on Sales	$222	$232	$230	$ 38	$268	$125	$ 42	$167	$ 47	$ 35	$245	$327
Deduct Selling Expenses:												
Salesmen's Salaries	$ 47	$48	$ 42	$ 14	$ 56	$ 30	$ 22	$ 52	$ 9	$ 15	$ 36	$ 60
Salesmen's Expenses	22	28	26	6	32	14	10	24	4	8	16	28
Advertising	8	9	10	28	38	8	26	34	5	6	21	32
Other Selling Expense	42	49	44	8	52	27	9	36	8	12	41	61
Total Selling Expense	$119	$134	$122	$ 56	$178	$ 79	$ 67	$146	$ 26	$ 41	$114	$181
Net Profit (Loss*) on Sales	$103	$ 98	$108	$ 18*	$ 90	$ 46	$ 25*	$ 21	$ 21	$ 6*	$131	$146
Deduct General Expenses:												
Office Salaries	$ 22	$ 24			$ 23			$ 25				$ 28
Officers' Salaries	18	24			30			30				30
Other General Expense	19	20			20			21				31
Total General Expense	$ 59	$ 68			$ 73			$ 76				$ 89
Net Profit (Loss*) for the Year	$ 44	$ 30			$ 17			$ 55*				$ 57

THE AJAX COMPANY — Exhibit A

Comparative Balance Sheet

December 31, 1944, 1945, 1946, 1947, and 1948

Assets

	1944	1945	1946	1947	1948
Current Assets					
Cash	$ 45	$ 48	$ 35	$ 22	$ 27
Accounts Receivable—Net	85	92	77	75	106
Inventories					
Finished Goods					
Product *X*	80	85	110	62	35
Product *Y*	—	—	65	87	27
Product *Z*	—	—	—	—	76
Goods in Process	20	22	31	35	42
Raw Materials	15	13	20	23	28
Other Current Assets	12	10	7	9	11
Total Current Assets	$257	$270	$345	$313	$352
Fixed Assets—Net					
Land	$ 10	$ 10	$ 10	$ 10	$ 10
Buildings	60	55	50	45	40
Machinery and Equipment	45	47	82	88	114
Tools	8	9	17	18	22
Patents	4	2	—	—	—
Total Fixed Assets—Net	$127	$123	$159	$161	$186
Prepaid Expenses	$ 12	$ 8	$ 28	$ 16	$ 18
	$396	$401	$532	$490	$556
Liabilities and Net Worth					
Current Liabilities	$ 55	$ 50	$124	$137	$146
Fixed Liabilities—Bonds, 6%	—	—	50	50	50
Total Liabilities	$ 55	$ 50	$174	$187	$196
Net Worth					
Capital Stock—$100 00 Par Value	$200	$200	$200	$200	$200
Earned Surplus					
Balance Beginning of Year	$127	$141	$151	$158	$103
Surplus for the Year, Before Dividends	44	30	17	55*	57
Total	$171	$171	$168	$103	$160
Less Dividends	30	20	10	—	—
Balance End of Year	$141	$151	$158	$103	$160
Total Net Worth	$341	$351	$358	$303	$360
	$396	$401	$532	$490	$556

* Debit

Problem B-2 On January 1, 1946, the May Manufacturing Company took over the business of Jennison Brothers The capitalization of the company was $500,000 00, divided as follows

6% Cumulative Preferred Stock	$200 000 00
Common Stock	300 000 00

On March 10, 1949, the annual stockholders' meeting was held and the financial statement on page 657 was presented.

MAY MANUFACTURING COMPANY
Balance Sheet
December 31, 1948

Assets

Current Assets:			
Cash		$ 10,000.00	
Notes Receivable		5,000.00	
Accounts Receivable		40,000.00	
Inventories:			
Raw Materials		50,000.00	
Goods in Process		75,000.00	
Finished Goods		65,000.00	
Sundry Factory Supplies		5,000.00	$250,000.00
Fixed Assets—Acquired January 1, 1946:			
Land		$ 40,000.00	
Buildings	$125,000.00		
Less Reserve for Depreciation	4,500.00	120,500.00	
Equipment	$380,000.00		
Less Reserve for Depreciation	24,800.00	355,200.00	515,700.00
			$765,700.00

Liabilities and Net Worth

Current Liabilities:		
Notes Payable	$150,000.00	
Accounts Payable	50,000.00	
Accrued Salaries and Expenses	5,000.00	$205,000.00
Net Worth:		
Preferred Stock	$200,000.00	
Common Stock	300,000.00	
Earned Surplus	60,700.00	560,700.00
		$765,700.00

The stockholders authorized the issuance of $250,000.00 of 5%, 15-year, first mortgage, sinking fund bonds, the proceeds to be used to retire the notes payable and to make necessary additions to the buildings and equipment.

The company has given the preceding statement and the following condensed operating statements to the Western Trust Company, which has an opportunity to purchase the entire issue at 94. The Western Trust Company asks you to examine the statements and to report upon the advisability of the purchase.

MAY MANUFACTURING COMPANY
Condensed Operating Statements

	1946	1947	1948
Sales	$630,700.00	$615,800.00	$899,200.00
Cost of Goods Sold	500,000.00	580,700.00	706,700.00
Gross Profit	$130,700.00	$ 35,100.00	$192,500.00
Selling and General Expenses	35,000.00	33,100.00	60,000.00
Net Operating Profit	$ 95,700.00	$ 2,000.00	$132,500.00
Interest and Financial Expenses	25,000.00	22,000.00	27,500.00
Net Profit or Loss*	$ 70,700.00	$ 20,000.00*	$105,000.00
Dividends	30,000.00	12,000.00	57,000.00
Balance to Surplus	$ 40,700.00	$ 32,000.00*	$ 48,000.00

Outline the report requested by the Western Trust Company State the reasons for your conclusions on the basis of data available and on the assumption that 4% is a fair composite rate for depreciation of buildings and equipment Also detail other points which should be investigated before a definite decision to purchase is made

INDEX

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O

P